Clinical Lecture
ON
CONGENITAL CATARACT.

Delivered at Queen's College, Birmingham.

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GENTLEMEN,—The human eye is subject to several curious congenital defects. Amongst those that have come under my own observation may be named fissure of the iris, or *coloboma* iridis, which is often symmetrical and accompanied by an interesting change of the fundus oculi, known as *coloboma of the choroid*. Of this change Liebreich gives an excellent illustration in plate xii., fig. 5. Less frequently there is a total absence of the iris. More common than either of the anomalies mentioned is microphthalmos, wherein there is an arrest of development of the several tissues of the eye; in a very extreme case that occurred in my hospital practice the corneæ were covered by cuticle, as also in one in which the eyeballs were represented by very small bulbs at the extremity of their respective optic nerves.

The most frequent defect—excluding, of course, cases of hypermetropia and myopia, with their complications, and nystagmus—is *congenital cataract*, a disease which is not infrequently associated with a more or less imperfect development of the globe; in many cases we discover evidences of an intra-uterine internal ophthalmia having existed, which is probably in certain instances a direct result of an iridо-cyclitis—in plain words, inflammation of the iris and ciliary body. I am not sure that it is always possible to determine whether an apparently atrophied congenital cataract represents a lens that was originally imperfectly developed, or one which had undergone intra-uterine atrophy. Occasionally the lens is reduced to a small cretaceous mass, and the iris closely adherent to it. In some the cataract is only an item of a general disease of the eye with attendant imperfect neuro-retinal sensibility, and therefore it behoves the practitioner to give in such cases a guarded opinion of the visual value likely to be conferred by an operation. Infants who are affected with congenital cataract are not seldom the subject of convulsions, or have been so prior to the opacity attracting attention, and it has been supposed by some that they hold the relationship of cause and effect, that the capsule of the lens sustains a rupture during the spasmodic seizure. I do not entertain this view, but consider the dual presence as either a coincidence or as having its origin in disease of the cerebral meninges, tubercular or syphilitic in its nature. While the fœtus is in utero the cataract often undergoes more or less absorption. I remember operating upon a case in which the capsules of normal diameters presented the appearance of finely perforated tissue-paper; these membranes were transparent, the opaque speckles being composed of minute atoms of lens matter. A single operation cleared the pupil in each eye. In so far as my reading extends, no case has been recorded in which spontaneous absorption of a congenital cataract has been observed throughout its stages, until the capsule, dotted with a few minute bits of lens matter, alone remained. It was my good fortune to watch one such case from the commencement to the end of the process; it was also seen by many of my professional brethren, and a note of its occurrence appeared in the *Medical Times and Gazette*. Of the complete conversion of the substance of a congenital cataract into fluid I had a good instance in a girl of between thirteen and fourteen years of age. Nearly the whole of the turbid fluid escaped at the side of the needle through the corneal puncture, leaving the pupils black and clear. The procedure was followed by a good deal of reaction. The cataract may, however—and, indeed, often does—present great solidity (relatively to the age of the patient), with a firm nucleus, which, when touched by the operator's needle, shells out, as it were, into the anterior chamber, and demands special treatment, in order to secure the eye from a troublesome if not dangerous irido-choroiditis. The hereditary transmission of senile cataract is an occurrence well known, and often met with in practice; congenital cataracts are illustrative of the same law.

Some few years ago I successfully operated upon three children out of a family of five, who were born with the disease we are considering. The father, a well-to-do farmer, had been successfully treated for cataract by needle operations (keratonyxis), when of the age of thirteen, by my revered clinical master, the late Mr. Joseph Hodgson, the founder, let me add, of the Birmingham Eye Infirmary. One of the five children died of convulsions, and was not operated upon; another was submitted to keratonyxis by that eminent surgeon, the late Mr. Paget of Leicester, during the pre-chloroform period. Convulsion came on during the operation, and continued until death terminated the scene. How gratefully should we cherish the memory of the discoverers of anæsthetics.

The existence of opacity of the lens was often overlooked before the ophthalmoscope and other optical aids came into general use. The child's manner when handling an object for visual scrutiny led the friends and doctor to the opinion that it was short-sighted (myopic)—a disease, it may be observed parenthetically, which is occasionally acquired in consequence of a defined image being attainable only, where there is a transparent rim in the lens, by placing objects very near to the face. In the case of a young gentleman in whom the two disorders coexisted, he got on very well until the margin of the lens through which he had been in the habit of viewing near objects became turbid in his best eye. I well remember the surprise of his friends upon being told that he had cataract in both eyes.

The treatment of congenital cataract is, I need scarcely remark, by the operation of solution, a good description of which is given in all ophthalmic surgical works. I esteem it an advantage where the capsule is thickened, or the lens very firm in consistence, to use two needles. And in healthy children, after opening the capsule, I like to make a small puncture at the margin of the cornea (paracentesis) to allow of the escape of any loose lens matter, and so to obviate choroidal irritation, and perhaps the increased tension that sometimes follows in its train. When the subject's health is questionable, notwithstanding carefully conducted treatment for its correction, I operate upon one eye only, and wait the result before proceeding to treat the companion organ. Where a firm nucleus escapes from the lens into the anterior chamber, I break it up by pressing it with the flat side of the needle against the concave of the cornea, supporting that membrane at the same time with the tip of the left index finger. In our efforts to attain solution of the cataract, it is important to avoid dislocation of the lens from its normal seat in the hyaloid fossa; the integrity of the vitreous humour should also be carefully guarded; and the young surgeon must restrain his hand from doing too much at the first operation. In atropine we have an agency which is directly and indirectly an antiphlogistic. It constricts the arteries, and by its mydriatic power keeps the iris out of the way of pressure from the cataract swollen by imbibition of aqueous. The mydriasis also promotes a more free exosmosis. If a second operation is required, and such is commonly the case, too long an interval must not be allowed to elapse, or the capsule will become tough and difficult of laceration.

In dealing with *lamellar cataract*[1] I prefer to leave one of the lenses intact, and to institute a narrow iridectomy on the outer circle of the iris of the same eye. On the companion eye I act by solution, having first premised a rather free iridectomy of the upper circle of the diaphragm. By this proceeding, originally proposed, Mr. Anderson Critchett informs me, by his father, I give my patient a good eye for near objects, and one for comparatively long distances, with which, if his refraction is good, he will recognise friends in the street unaided by a glass. In many of my cases the eye has been hypermetropic, when a suitable spectacle-glass was required for its correction. We are sometimes consulted about young people of from twelve to fourteen years of age, who, although their eyes are cataractous, have been able to get through the usual curriculum of school work. But it is

[1] It is held that very early in the growth of the lens, probably in utero, its nutrition becomes disturbed, and either through a mechanical shock or some constitutional disease the fibres then forming the external layer are damaged; and when additional healthy layers are laid down, the damaged layers remain as a more or less opaque layer. The result is a *lamellar* cataract.

attended with fatigue, and the eyes get red and irritable. What is the best thing to be done? I advise operative interference where a career that demands serious study has been determined upon. In the instance of children unhealthy from hereditary disease, persevering exclusion of light from the eyes during the treatment may ensure a success which would otherwise be unattainable.

Clinical Remarks ON GOUTY PNEUMONIA.

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GENTLEMEN,—I shall to-day direct your attention to a case which will, I think, be interesting to you as well as instructive, inasmuch as it is an example of gouty pneumonia—of pneumonia occurring in a gouty patient. The fact that gout suddenly appeared one night in the big toe, and that the pneumonia from that moment rapidly disappeared, makes the case to my mind more interesting still. I feel confident that many of the cases of pneumonia we meet with are local exhibitions of gout accompanied by the febrile symptoms met with in such cases, and this should certainly be remembered in treatment.

The patient whose case we are considering had always been a very free liver and drinker, and had frequently suffered from gout. I found that he had been taken suddenly ill one night, having previously been in apparent good health, but very irritable. He had suffered from cough, expectoration, and other symptoms. As he rapidly got worse, the friends became alarmed, and sent for me. I found the pulse was 130, full; respiration 40; temperature 102°; cough troublesome; phlegm abundant and rusty. The patient complained of pain in the chest generally, and had the other symptoms present in cases of pneumonia. The urine was scanty, and slightly albuminous. He had no cardiac mischief, but the lower third of his right lung behind was dull and crepitating. I shall not weary you by telling you how he progressed day by day, but simply say that he steadily got worse for about eight days. On the eighth day of my attendance I found that the lower three-fourths of the right lung was as dull as a board; distinct bronchophony was to be heard both in front and behind, and crepitation in the lower part of the left lung. He coughed up incessantly night and day the ordinary rusty-coloured sputum. Respiration 44; pulse 140; temperature generally 102°; tongue dry and red. The urine was still very high coloured, full of urates, and albuminous, and he was very delirious. I certainly thought that I was going to lose my patient. The next night he was very delirious and insisted on getting out of bed. In spite of the entreaties of his nurse, he was determined to walk about, and continued to do so for a considerable time. He then went to bed and fell asleep; when he awoke he complained of excruciating pain in his right big toe, which was very red and swollen. It evidently was a severe case of gout. On the second day after the toe had been attacked, on examining the lungs, I found that dulness and crepitation had taken the place of bronchophony. On the following day very little dulness could be heard, the crepitation had almost entirely gone, and air entered fully into every part of the lung. The toe was very painful for three days longer and then quickly got well. The general symptoms rapidly disappeared.

We are all apt to look upon pneumonia as an inflammation of the lungs which must be treated by certain remedies. Years ago it was the custom to bleed or leech in nearly all cases of pneumonia, and antimony used to be given sometimes in large and depressing doses. More recently stimulants in large and small doses have been strongly recommended, and I know that many have been in the habit of giving stimulants in almost all cases. Some give quinine or bark. What I wish to impress upon you is this that we are all t apt to treat a name, and to forget that there are pneumonia and pneumonias, depending upon entirely different causes. In one case you may have to support your patient from the beginning; in another quite a different mode of treatment may be required. Pneumonia is not always a disease accompanied by debility and requiring tonic or stimulating treatment. In each case you will have to consider hereditary predisposition, which always has an influence upon local disease accompanied by general symptoms. In each case you will also have to take into consideration the habits of life of the patient, the surrounding circumstances and exciting causes. In this case I had to treat a gentleman who had lived too freely, who had a strong gouty tendency, and I looked on the pneumonia as a local sign of gout. When the gout appeared in the big toe the lung symptoms all seemed to go at once, and in a very short time all the physical signs of pneumonia had disappeared. I believe that if I had treated this patient by giving stimulants in large doses with bark or quinine I should have interfered with nature, and done more harm than good.

ON THE NATURE OF PNEUMONIA.

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THE scrutiny of disease reveals features which are unconsciously divided by the observer into such as do and such as do not conform to accepted types. The former class, while they may accord with received doctrines, with the descriptions of books, or with our own previous experience, are less fruitful of progress than the latter, which, indeed, appear exceptional, but in reality exhibit law, and when carefully studied may interpret that which they exhibit. Nine cases of pneumonia, selected from many more admitted to the London Hospital during the spring of 1884, furnish the text of these remarks. Of these cases, being such as lay under the writer's especial observation in two wards, six were fatal and three recovered. The latter were as follows.

CASE 1.—John E——, a strong and sound man, aged thirty-seven, who presented, with the usual symptoms, consolidation of the right lung in its upper half. The temperature fell suddenly on the fifth day, and there was a rapid and complete recovery. This man complained of a "weight" in the right side of his chest, which "fell over" when he turned on to the left side.

CASE 2.—Frederick B——. This was a boy aged fourteen. The illness began with "vomiting all day," febrile symptoms, and pain in the left side. He was admitted on the fifth day with a temperature of 104°. On the following day the thermometer registered 99°, and did not again rise. Here there was a fleeting consolidation of the left base, but without the usual increase of tactile vocal fremitus.

CASE 3.—George W——, aged twenty-one, who had pneumonia of both bases. He came in on the third day with a temperature of 104°. At this time hardly anything could be discovered wrong with the lungs. Shortly afterwards, however, a little dulness and harshness of breathing were detected at the left base. The expiratory murmur became tubular at the spine of the left scapula; inspiration was soon similarly affected, and these signs, with increase of tactile vocal fremitus and of voice, swiftly invaded the lower half of the lung. Meanwhile, a similar change began on the right side; but before consolidation was developed there a crisis occurred (eighth and ninth days); the temperature fell 4½°, the pulse dropped from 120 to 60, and, with increasing physical signs at the right base, the patient rapidly became well. This man was young and sound. A notable feature was the energy of absorption of pneumonic product, to such an extent that there was no crepitatio redux and no sputum coctum. He got perfectly well.

These cases are distinct in respect of the areas invaded and of the character of the process—localised in one, spreading in another. Apical pneumonia, apart from phthisis, is probably rare. Croupous pneumonia of a base, especially of the right, is very common; and, as in the case of the little boy, may remain limited to the base. Progressive pneumonia of both bases (no reference is made to "hypostatic monia," or pneumonia in old, debilitated, or alcoholic persons) appears to be a not unfrequent variety of the disease; and, as we shall see reason to believe (*vide infra*), is a comparatively favourable form. The three cases are at

one in respect of recovery, and of the concurrence in each of free deposit, early crisis, and rapid absorption. To that concurrence I shall again allude.

In regard to the six fatal cases, the first of the series was the following:—

CASE 4.—Henry N——, a strong, hearty, sailor-boy, aged eighteen. He had a double pneumonia, filling both lungs more or less. It began in the left, but very soon involved both sides. Then ensued the almost mechanical inconveniences attendant upon the deprivation of so much breathing surface, and for awhile the case hung dubious in delirium and high fever. The verdict was given against life, and, instead of pneumonia, we then had a case of true pneumonic phthisis to deal with. Lung tissue appeared in the sputum; signs of cavity at the left apex, presently followed by similar signs below the left scapula and on the right side. After forty-six days' illness he died, and the lungs were found riddled with cavities and disorganised pneumonic deposit.

Comparing this case with that of the double pneumonia which recovered, why, it may be asked, was the result so different? The subjects of both were young and healthy men. So far as local manifestations are concerned, I may observe that the upper part of the lung was involved as well as the lower, and that, in the second place, the deposit appeared to be very rapidly formed and tightly packed. Thus nature was put at a great disadvantage in the struggle for life, nearly the whole lung surface being stuffed with deposit, which, driving the blood from the alveolar walls, put them in peril of local death, and a deposit also which *ab initio*, in the writer's belief, was of such a nature as to make regressive change therein far more likely than emulsification and absorption. That difference in the local manifestation is of course grounded on a corresponding difference in the type of the disease.

The second, third, and fourth fatal cases form by themselves a group remarkable in the uniformity of symptoms presented and course observed:—

CASE 5.—William W——, a remarkably stout, muscular navvy, aged twenty-three, was indisposed for two days, but remained at his heavy work excavating on the railway adjoining the hospital. After walking upstairs into the ward, flushed and feverish, he presently began to vomit. Hardly a sign was at this time present in the chest. In a few hours were detected deficient resonance over the upper half of right front, with slightly increased fremitus and fine hair-like crepitations in one or two places. There was great distress, restlessness, night delirium with violence, a bounding pulse, and a dry burning skin. He was packed, bled, blistered, and dosed with antimony, but in fifty-six hours from admission he died, a sudden plastic pericarditis having supervened. The lower part of the right lung in front was stuffed with grey hepatisation, and the adjoining pleura with the pericardium were loaded with buttery lymph. Elsewhere, excepting engorgement and some collapse at the right posterior base, there was nothing. The blood was dark and the spleen soft.

CASE 6.—William J——, aged thirty, said he had been ill for ten days, but he walked to the desk at the out-patient department, where he was taken in. He complained of a cutting pain in the right side of his chest and abdomen, shivering, thirst, cough, and shortness of breath. He was pale, trembling, nervous, perspiring, and gasping for breath. His pulse was 130; his temperature 103°. On examination there was slight dulness at the right posterior base and over a small patch three inches below the same clavicle. Whistling tubular breathing was heard over a very small area just within the right anterior axillary fold, and more diffused between the right scapula and spine. With little increase of these signs, the patient died from violent nervous excitement thirty-six hours after admission. The post-mortem record states:—"Right lung: Anterior base covered with thick false membrane. Middle lobe in a state of grey hepatisation, excepting posteriorly, where it is red; at upper and outer part of this lobe lung very friable and quite bloodless; hepatised portion distinctly limited from much congested apex. Lower lobe hepatised in front, wholly collapsed and carnified behind. Left lung intensely congested. Heart, pericardium, &c., normal."

CASE 7.—Charles B——, aged twenty-three, had been ill when admitted for five days with shivering, pain in the right side, cough, and night delirium. But the morning before admission he rose and dressed himself and came to the hospital. On admission he was flushed, excited, sleepless, and sprinkled with a petechial rash consisting of small angular red or purple spots, unaffected by pressure and surrounded for the most part by a thin white line. His temperature was 104°, pulse 138, and respiration 28. At this time there was a faint deficiency of resonance at the right base posteriorly, with very fine crepitations and slightly increased voice. The following day he was decidedly worse; physical signs but slightly increased; much delirium and sweating. Two days from admission the dulness had spread round into the right axilla, being abruptly limited above and in front; over the dull area there was tubular breathing; at its margin a fringe of small crepitations; at the back of the left lung tubular breathing and crepitation in one spot at the base. Shortly afterwards the temperature rose to 105°, 106°, 108·4°; and seventy-two hours from admission the patient died with clonic convulsions. Post-mortem: In the right lung "all the lower lobe and a small part of the contiguous margins of the middle and upper lobes were in a state of grey hepatisation. About half the middle lobe and nearly all the upper were quite free from hepatisation, but were intensely congested. In no part of the grey mass was there sign of breaking down, although the lung was very friable. Section showed that great numbers of the smaller tubes were filled with croupous casts. The pleural surface of the hepatised lobe, covered at the base with false membrane, was of a pale yellow-grey colour. In left lung extreme congestion; small nodule of red hepatisation at the posterior base. Endocardium, aorta, and pelvis of kidney stained of a claret colour. Blood for the most part fluid and very dark."

Some would assign these cases to septic causes. They appear to answer to the older descriptions given of "malignant pneumonia" and "ataxic pneumonia." Trousseau pointedly speaks of such; he says that the local signs teach comparatively little, and lays particular stress on the *want of harmony* between disturbance and apparent cause. The former is out of all proportion to the latter. That is nearly equivalent to an affirmation that the disease is a general one, and that the local lesion, even if apparently so, is no true cause of it. The same authority describes another variety of pneumonia as "erysipelato-phlegmonous," which has insignificant local beginnings, and invades the surrounding lung with development of malignant symptoms. This is, in his view, about the worst form of pneumonia, the whole lung being ultimately affected by a progressive invasion. In regard to erysipelas *vide infra*; but with respect to Trousseau's remarks on this last variety, in the passage previously referred to, he allows lack of correspondence between local sign and general state, hinting that local state is not local cause. Adapting his own generalisation to the progressive form, we may consider, with all deference to the great clinician, whether the invading pneumonia is not the less serious form, and, indeed, the form usually followed by recovery (*vide* case of George W——, *supra*); and the following suggestion may be made, which is almost the correlative proposition—viz., in pneumonia the severity of the disease is in inverse proportion to the extent of the pulmonary lesion. Let it be understood that by "extent" is implied *area*, and not intensity; for in the three cases last described a most intense pneumonia was found, stripping a small and sharply limited area, around which nothing but engorgement was visible. This may appear to be an unreasonable and extreme doctrine, and doubtless it admits of exceptions; but it rests on the support both of post-mortem observation and of valid analogy. What have we, for example, in *variola sine variolis* but a disease debarred from its local expression, or, it may be, natural outlet? What have we early in scarlet fever, when with hyperpyrexia there is no rash? Surely, the very same condition. What had we, finally, in the patient Charles B—— but a pneumonia, against the local expression of which there was some unknown resistance, and which burst forth in petechial eruption, delirium, hyperpyrexia—in a word, malignant fever? The severity of a fever is proportional to the resistance which the organism opposes thereunto.[1] The limits of the doctrine in regard

[1] Dr. Hingston Fox, who shares in the views just stated, and to whom the writer is indebted for numerous valued clinical observations and suggestions, writes: "I have known severe cases of pneumonia with delirium, prolonged fever and asthenia of dangerous type, with comparatively easy respiration, little cough, and slight auscultatory signs. On the other hand, in a case now under care, nearly the whole of the left lung has been consolidated, respiration taking place almost entirely on the right side of the chest, with heart displaced to the right, and yet the fever was never high (once 103·8°, generally under 102°), the general condition comfortable, and convalescence regular and steady."

to local lesions are of course obvious. Although a full development of the rash is favourable in measles, there is a malignant form with a deep and petechial eruption. The two double pneumonias above related (George W—— and Henry N——) furnish respectively corresponding types of this disease also. The proposition implies that in pneumonia, as in the exanthems, an early and abundant local expression is a favourable sign. That the local change is no measure of severity we are fully aware; that it may progress and extend coincidently with a general amelioration we also know from experience (*vide* Case 3, *supra*) as well as by the teaching of the highest authorities. Trousseau says: "Improvement takes place about the eighth day, while the physical signs remain in their plenitude." It is not a long or rash stride from this admission to the suggestion I have just made.

The two remaining fatal cases were provisionally entered in the writer's case-book as "febris pneumonia" simply to convey the belief that they exhibited the specific fever, without obvious local sign.

CASE 8.—William K——, aged forty-four. In this case there was an illness of five days' duration, with high fever, delirium, and petechial rash; and post mortem black fluid blood, staining the aorta and endocardium, soft spleen, petechiæ on the kidneys, and highly congested lungs, with nodules of hepatisation in the lower lobe on the right side.

CASE 9.—Henry B——, aged thirty-two, was brought in about the same time, with a very imperfect history. Temperature 104°. He died the next day; and post mortem the same condition of blood and glands was found, but no hepatisation in the lungs.

Some will question the propriety of including these last with the previous three cases of malignant pneumonia; but, in reply, it may be urged that in the latter the lesion was small enough, and clinically all of them present an undoubtedly close resemblance.

If the nine cases now related are admitted within the pale of the one disease, "pneumonia"—and most of them must be so admitted,—they illustrate curious variations in its character and type. Such variations have not induced writers to declare specific or fundamental difference, so long as they have been able to class all known varieties under one definition. Assuming that such classification is justified, and that we may speak of all the foregoing as cases of pneumonia, what does their study teach us as to the nature of this disease? We find it acute, febrile, and most variable in local expression; but what of its etiology, that essential element in definition? The causes of pneumonia, like those of most general febrile diseases, are obscure. Pneumonia occurs with a north-east wind, say some; in close muggy weather, say others; or after severe and protracted winters; that it often follows exposure to cold; *that it is commoner in some seasons than in others;* that its mortality varies considerably in different seasons; that it occurs sometimes in a series of cases; and that its prevalence in this form is coincident with a certain "epidemic constitution," in virtue of which erysipelas, croup, articular rheumatism, and inflammatory disorders are found in great abundance (Niemeyer); that these series of cases are consequent upon other epidemics—influenza, measles, &c. The occurrence of such series, which is well proven in numerous instances, is assigned by some to contagion, by others to the operation of a common cause. That divergence of opinion casts no doubt on the ascertained fact of the existence of an epidemic form of pneumonia—an affection which must now take its rank, on clinical and etiological grounds, as an *acute specific febrile disease.*

At present two varieties of inflammation are recognised, specific and non-specific. One day the latter may be disowned and denied. In erysipelas we have doubtless an example of the former variety. The clinical impression may be hazarded that erysipelas and pneumonia are nearly allied. The pyrexia is abrupt, with a single rigor. The invasion in both cases is the invasion of a restless and most active enemy, who makes no sign of approach, lays no formal seige, but carries the town by the first assault. As the arrival, so is the departure. Of course in erysipelas there are often *sequelæ*, destruction of affected tissue, purulent fever, passing into hectic; and these supersede the first affection. The same, *mutatis mutandis*, applies to pneumonia, which often, by *destruction*, passes into phthisis, a distinct disease. Trousseau evidently saw the resemblance between these two affections when he designated one variety of pneumonia "Erysipelato-phlegmonous"; and Paulus Ægineta, speaking of peripneumonia, remarks: "When the symptoms incline to a more ardent type it is to be apprehended that the inflammation is of an erysipelatous nature." Case 5 illustrates the great inflammatory energy sometimes present in pneumonia. It burst with sudden violence upon the pericardium, and that, with the adjacent serous membranes, was coated for half an inch depth with yellow lymph. *Apropos* of this and its companion cases (6 and 7), it is interesting to observe that the consolidation affected first the centre of the lung and spread downward, but especially forward. Sydenham has these observations: "After attentively considering the various phenomena of this disease (he is speaking of pleurisy), I think that it is a fever originating in a proper and peculiar inflammation of the blood—an inflammation by means of which Nature deposits the peccant matter on the pleura. Sometimes she lays it on the lung itself, and then there comes a peripneumony." Adding: "Peripneumonies differ from pleurisies in degree only." The modern doctrine of disease is not unfrequently a reversion to older views.

In conclusion, sundry questions present themselves. Are "patchy" pneumonias (broncho-pneumonia) examples of this affection? Does it include pneumonias occurring, perhaps repeatedly, in individuals of phthisical family history or of a personal vulnerability of lung? Does it include the pneumonias of the old and bedridden, of inmates of infirmaries, of convalescents from acute diseases? In reply, we may believe that many patchy pneumonias are in reality true pneumonia; that in the aged infirm the process is commonly quite distinct, and that the "hypostatic pneumonia" there found is mainly the result of chronic congestion; that in convalescents (as in measles) the pneumonic process is absolutely distinct, commonly catarrhal in type, and in no sense comparable to the true pneumonia, which is a primary specific disease; lastly, that persons with vulnerable lungs are just those in whom one would expect the pulmonary eruption of this fever.

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NOTES ON A CASE OF

ACUTE CROUPOUS PNEUMONIA TREATED WITH COLD SPONGING OF THE CHEST; RECOVERY.

BY J. STIRLING BUCK, L.R.C.P. ED., M.R.C.S. ENG.

ON the evening of Sunday, May 31st, 1885, I was sent for to see E. L——, a robust male aged thirty-five years. I was informed that he had been "ailing for a week or more"; but the evening previous to my being sent for he was seized with severe shivering, pain in the side, and shortness of breath. On examination, I found all the usual symptoms of acute double basic pneumonia. Temperature 104° F.; pulse 120; respiration 48. I ordered jacket poultices of linseed meal to be applied every four hours. I also ordered him a mixture containing five minims of tincture of aconite, half a drachm of antimonial wine, and five minims of ipecacuanha wine in each dose, every four hours; a diet of milk and beef-tea to be given frequently, and ice to suck.

On June 1st the symptoms remained much the same.—2nd: I was sent for hurriedly by a message that the "patient was dying." I found him very delirious and suffering with profuse diarrhœa, passing his motions and urine involuntarily. Respiration 60; temperature 106°, pulse 140. I ordered a mixture containing forty grains of aromatic chalk powder to a dose, every two hours for the diarrhœa; and a mixture containing five grains of carbonate of ammonia and an ounce of the decoction of cinchona every three hours. He was given small quantities of good veal broth, alternating with milk frequently, an ounce of brandy every two hours, and ice to suck.—3rd: I found the patient worse. Temperature 106°; pulse 140, very weak; respiration 80. The diarrhœa had ceased, but he was still very delirious. Seeing that the patient would rapidly die unless something else were done, I ordered the back and front of the chest to be sponged every hour with cold water, continuing the brandy and nourishment as before, and gave him an expectorant mixture, containing five minims of ipecacuanha wine and ten minims of tincture of squills in each dose, every four hours.—4th: I found a

marked improvement. The temperature had fallen to 103°; pulse 120; respiration about 40. Delirium much less, at times breaking out. Treatment continued.—5th: Much improved. Quite conscious, but very exhausted. Temperature 100°; pulse 110, much stronger; respiration 34. Treatment continued.—6th: Improvement continuing. Temperature 99°; pulse 100; respiration 30. Cold sponging now ordered only twice a day. Brandy and nourishment continued.—7th: Temperature normal. Pulse rapid and rather weak, 100; respiration about 25. Treatment continued excepting the cold sponging, which I ordered to be discontinued.—14th: Patient now convalescent; is out of bed for a short time to-day. Temperature normal; pulse 90, stronger; respiration nearly normal. Has a cough. I ordered a mixture of ten minims of dilute sulphuric acid, five minims of ipecacuanha wine, ten minims of compound tincture of camphor, one drachm of syrup of red poppies, in water, every three or four hours.—25th: Patient progressing well. Has been out of doors. Cough much better.

On July 1st the patient went away for change of air. On the 27th he returned home and called upon me, and appeared to be quite well. An examination of his chest revealed nothing, and the breath-sounds were good.

Remarks.—Cold sponging of the chest in acute pneumonia is recommended to be used with very great care, or passed over altogether, in many of the text-books on the subject, I believe. This is the first case in which I have ever cared to use it in such an instance; but as I could plainly see that on June 3rd he was rapidly dying, and taking into consideration his high temperature and rapid pulse, I determined to do it, with the above happy result. I may add that his brother-in-law, who was most careful in carrying out my orders, was most instrumental in effecting his recovery.

Bromley, Kent.

THE

SURGICAL TREATMENT OF GALL-STONES.

BY LAWSON TAIT, F.R.C.S.

THE only reasonable explanation of the formation of gall-stone with which I am familiar is one by Dr. Thudichum, that they are formed of deposits of cholesterin and colouring matter round casts derived from the finer ramifications of the hepatic ducts. This explanation is at least consistent with all the facts which have come across my own personal observation in dealing with gall-stones from the surgical point of view. It is very well known that gall-stones form in the substance of the liver itself, and that they are found in the hepatic ducts sometimes of large size. I myself have cut two out of the substance of the liver, the larger being more than an inch in length. They had given rise to suppuration, and were undoubtedly the cause of the hepatic abscesses for which I operated. But the great majority of the cases of gall-stones with which we have to deal surgically are contained within the cavity of the gall-bladder, and for clinical purposes it seems to me necessary to divide them into two varieties. The symptoms which they give rise to, and to some extent the details of the operation required for their removal, differ considerably in the two varieties. I am inclined to believe that the pathology of the two forms is not quite alike; but I have not the time now, nor indeed the opportunities, required to follow out the research which this view suggests. Suffice it for the present for me to repeat that for clinical purposes there are two kinds of gall-stones—we may call them the solitary gall-stones and the numerous gall-stones. The solitary gall-stone is not always quite solitary, but it has rarely more than one companion. The numerous gall-stones, on the other hand, are practically indefinite in quantity, and are generally of a pretty uniform and not large size. It may be that the solitary gall-stone is a mere remainder of the multiple formation, as may be explained by-and-by, but I have not found any evidence that this is the case. Let me describe in the first place two typical cases, one of each of the two forms, in order that the differences in the symptoms and in the peculiarities of the operation may be distinctly seen. The first solitary kind of gall-stone was very well illustrated by the first case of cholecystotomy which I performed, the first successful case on record. It has been already published in detail in Vol. 63 of the Medico-Chirurgical Transactions.

Elizabeth M——, aged forty, was admitted to the hospital on August 18th, 1879, having been sent to me by Dr. Abraham Colles of Bridgnorth, on account of an abdominal tumour. She had been married eighteen years, had borne six children, her menstruation had always been normal, and she had enjoyed perfectly good health until the summer of 1878. At that time she began to suffer from severe spasmodic pains in the right side, these being always aggravated by walking or by lifting even slight weights. In September she noticed a swelling at the seat of pain, and this slowly increased. During the previous winter her pain became much more intense, her appetite failed, she lost strength and flesh rapidly, and on admission she presented an emaciated and almost cachectic appearance. She also suffered at that time from incessant headache and sickness, and obstinate constipation. The seat of pain was over the right kidney, where there was a heart-shaped tumour, firm and elastic, in which no fluctuation could be detected, and which was extremely tender to the touch. On examination under ether this tumour was found to be perfectly movable toward each side; indeed, it could be pushed completely across the middle line to the left side. All round it a note of intestinal resonance could be produced. When pushed over to the left side its heart-like shape became very apparent; and when it lay on the left side of the vertebral column, with its apex directed downward and to the left, its base evidently retained a connexion with the right side. A careful examination of the urine gave only negative results, though she spoke vaguely of its having been occasionally dark in colour, muddy, and deficient in quantity. At the consultation held upon the case a variety of suggestions were made for diagnosis, the chief of which were cystic enlargement of a floating kidney, a tumour of the head of the pancreas, and dropsy of the gall-bladder. But no decided diagnosis was attempted, and my proposal to open the abdomen and thus ascertain the nature of the tumour was agreed upon. On August 23rd I opened the abdomen in the middle line to the extent of four inches, the umbilicus forming the centre of the incision. It then became at once evident that the tumour was a distended gall-bladder. I passed the needle of an aspirator into the apex and drew off a quantity of white starchy-looking fluid, probably amounting to between twelve and fifteen ounces; but I cannot speak positively as to its amount, as it was unfortunately thrown away by a nurse immediately after the operation. I then opened the gall-bladder at the point of puncture, so as to admit my finger, and came at once upon a large round gall-stone lying loose in the cavity. This I easily removed, and on further search I found another of rather larger size, and probably of pear shape, at the entrance of the duct, impacted in it, and evidently the cause of the dropsical distension of the gall-bladder. The removal of this stone was a matter of very great difficulty; in fact, it took a very much longer time to effect than all the other steps of the operation put together. From the long, narrow, funnel-like cavity in which it was lodged, and from the mobility of the bladder, it was very difficult to seize, and when at last I did get hold of it I found it adherent to the mucous surface. I had then to consider the extreme likelihood that in removing this impacted stone I might tear the walls to which it was attached, and thus certainly kill my patient. I therefore performed a very careful and protracted lithotrity, chipping little fragments off the stone regularly all over its exposed surface till I had the satisfaction of lifting out its nucleus. I then passed the blade of a fine pair of forceps on each side of it, and by a gentle squeeze broke up the remainder, and was then enabled to lift it all out. The weight of the stone removed entire is 4·2 grammes, and that of the fragments I could gather of the broken stone is 2·9 grammes; but of the latter as much again must have been lost on the sponges which were packed into the wound during the process of crushing, and upon which I had constantly to wipe my instruments. I washed the cavity out repeatedly, and took every precaution that I could to secure that no fragments were left. I then stitched the wound in the gall-bladder to the upper end of the wound in the abdominal walls by continuous sutures, leaving the aperture into the bladder quite open; and then I closed the rest of the abdominal opening in the usual way. She rallied from the operation completely in a few hours. In the further progress of the case there is very little to report, save that the flow of bile from the wound continued till September 3rd, when the dressings were discontinued, and zinc ointment was used in their place. The

stitches were removed, and the wound was completely healed on September 9th, when she began to take solid food, up to that time her diet having been restricted to milk and beef-tea. On the 14th she sat up for the first time, and on the 30th she went home quite restored to health, free from pain and all her former symptoms, and having gained at least fourteen pounds in weight. This patient remains in perfect health.

In this case it will be seen that the symptoms were never of an extremely acute kind, but the patient suffered perpetual discomfort, and very often the pain was somewhat severe. The impaction of the gall-stone in the cystic duct in such a case prevents the flow of bile into the gall-bladder, and all the bile passes straight into the duodenum in a continuous stream. None of the experiments which have yet been performed on the livers of animals give anything like a satisfactory explanation of the function of the gall-bladder, nor of the function of the bile, nor even of the rate at which the bile is secreted. The experiments which have been performed in my cases of cholecystotomy make it perfectly certain that the flow of bile is continuous in quantity, and, so far as I could determine, is fairly so in quality. The function of the gall-bladder seems to be the result of the meal system of humanity—that is to say, the secretion of bile is from time to time diverted, either wholly or partially, from the duodenum into the gall-bladder, and there it is stored until required, and, when required, a double stream, one from the liver and the other from the storage in the gall-bladder, is passed into the duodenum. I have come to another conclusion, of a curious and certainly novel kind: that the quantity and quality of bile is greatly influenced by the condition of the peritoneum; for one of the earliest and most important symptoms in abdominal trouble is the occurrence of bilious vomiting. I have uniformly found that, if I can get ahead of this by rapid purgatives, I save my patient from fatal peritonitis. I regard Seidlitz powders as far more important in abdominal surgery than all the ingenious contrivances of Lister. It is not unlikely, but it is not known to be the fact, that the double exit of bile, of which I have just spoken, takes place whilst digested food is passing through the duodenum—certainly one can imagine that it would be at that time most needed; whilst, on the other hand, as this bile would to some extent arrest the process of digestion already accomplished in the stomach, it is just possible that this theory is exactly the reverse of what actually happens. We are, indeed, in a condition of absolute ignorance upon all these questions. I have watched some of my cases with the greatest care to ascertain, if possible, when the contraction of the gall-bladder, which must have some kind of periodic discharge, took place, but I have entirely failed to obtain any clue to it. It must be perfectly clear that if, in such a case as the one I have described above, there should still remain, as doubtless there would, some machinery in action by which the gall-bladder could be made to contract periodically, it would do so in obedience to directions of a uniform kind, and failing to empty itself, by reason of the gall-stone impacted in its neck, it would cause discomfort and pain. This sort of indication has been noticed clearly in some of my cases, but I have not yet been able to determine any definite relations in its occurrence; but it is in such observations that we should find the clue to the true functions of the gall-bladder.

The solitary gall-stone, when cut in two, shows that it has grown very much like a calculus in the urinary bladder by consecutive layers of deposits. It is nearly always of fairly large size; and the number of rings which are comprised in its section show that it has been in its location for a very considerable time. An instance in its history at last occurs by which, apparently in a contraction more than usually vehement for the emptying of the gall-bladder, it gets lodged in the neck of the cavity so firmly that from that moment no bile passes from the hepatic duct backwards into the gall-bladder. Then we find that the secretion of the lining membrane of the gall-bladder itself, which most certainly must always be going on in health, is found to play a very important part in the pathology of the case. This mucus contains a ferment, a fact which I have ascertained beyond all doubt; but I have not thought it worth my while to make a protracted research into the nature and reaction of this interesting substance. It is contained in a considerable quantity in the mucus, which is always found in a distended gall-bladder when the solitary gall-stone is impacted in the cystic duct. This mucus is always of the same character, very like the old-fashioned quince bandoline used by the ladies of the early part of the Third Empire for fixing their hair. It resists putrescence for a very long time, and has some most curious reactions. It is probably secreted by the lining membrane of the gall-bladder during a period of activity, to be again to some extent absorbed during the periods of rest, and at each time of contraction of the viscus it aids in the process of driving the stone further and further through the cystic duct. So far as such cases have come under my own observation, the stone is very rarely indeed driven through the duct when of the large size which characterises the solitary stone. The trouble in the gall-bladder finally leads to suppuration, and then the stone is evacuated by one of two ways: either by the adhesion of some piece of intestine to the inflamed gall-bladder, and the formation of a fistula between the two canals through which the stone is allowed to pass; or by the adhesion of the base of the bladder to the abdominal parietes, followed by suppuration, ulceration, and the discharge of the contents of the gall-bladder through the outside wound. Large solitary stones have often had this history. I have seen several instances myself of both methods of termination, and medical literature is full of the records of such cases, and in not a few instances where the discharge of the stone took place through the intestine fatal intestinal obstruction has been the ultimate result. The feature which I want to impress upon my readers is that in these cases the stones are never numerous; and in the great majority of the instances they are quite single. In cases of solitary gall-stones, therefore, we find a very frequent incident in distension of the gall-bladder, the distension being so great as to present the appearance of a large pear-shaped tumour containing a pint, or perhaps even two pints, of opalescent mucus—never bile. The operation in such a case is easy enough so far as the opening of the gall-bladder is concerned and the bringing of it outside; but the removal of the calculus impacted in the distended neck of the gall-bladder is an extremely difficult thing. It consists really of a kind of lithotrity, because it is necessary to remove the fragments very completely. I have a pair of alligator forceps for seizing and crushing the stone, and I drive out the fragments by the aid of a stream of water, after the stitching of the gall-bladder to the wound has been effected.

Different altogether is the condition which we find in cases of numerous gall-stones, and I need not remind my readers that many hundreds of these stones are sometimes found in the same gall-bladder, varying from a mere fraction of a grain in weight to eight, ten, or twelve grains, the great majority of them, however, running to a very uniform size, between two and three grains. It does not require much thought to come to the conclusion that the pathological condition which brings about the existence of these calculi is in all probability a different one from that which leads to the formation of the solitary stone. Whether Dr. Thudichum's explanation would apply to both or not is a matter of doubt; but if it should, it is perfectly clear that the formation of the numerous stones must be a continuous action, and that the nuclei upon which they are coated must be thrown off in a sort of continuous fashion. After having been formed in the gall-bladder by a deposit of cholesterin, they are perhaps denuded of it to a certain extent by pressure, but greatly by friction, or so modified by pressure as to assume the facetted appearance so well known. I had once in my possession a gall-bladder, removed after death, full of stones, which were so perfectly facetted that they fitted together very much like the pips of a pomegranate, each facet fitting to its neighbour with mechanical exactness; unfortunately the specimen was destroyed by an accident. In the cases of solitary stones the nuclei are certainly much more rare, and their production is not continued for so long a time as in the other cases. The growth of the stones of both kinds of course takes place in the gall-bladder; but it is clearly a delusion which has guided the men of great authority who, in a recent discussion of the question, expressed their belief that the gall-bladder is the cause of gall-stones, and that to prevent their production the gall-bladder must be removed. Nothing could be more absurd. The existence of the urinary bladder does not certainly cause stones to grow there, and it would be quite as reasonable to remove that important organ after the operation of lithotomy as it is to advocate the removal of the gall-bladder after its contained stones have been evacuated.

(To be concluded.)

NOTES ON THE DEAFNESSES.

BY ROBERT T. COOPER, M.A., M.D.

IT is obvious that the symptom "deafness" must accompany a variety of affections of the ear. The ear being devoted to hearing, its chief purpose in the economy, almost every imperfection in its constituents that is wrought by the influence of disease will in most cases be attended with a more or less prejudicial influence in regard to this, the principal function this organ performs. And as we are in the habit of applying the term "deafness" to every form of imperfect hearing, it is plain that it carries with it a meaning wider and more indefinite than is desirable in a science aiming at exactness and precision. This being the case, I purpose in this paper to consider the early stages of the commoner and more pronounced forms of the disorder, deafness, with special reference to the question of their curability. We shall find that while there is stamped upon all ear affections an apparent uniformity by the presence of deafness, and I may add of tinnitus aurium as well, there is yet to be found upon close inquiry certain broad and easily recognised characteristics by which we can distinguish and differentiate between them, and that these characteristics constitute valuable indications for the selection of the appropriate remedial agents. It is evident that, as pointed out in a series of articles by me on Basic Aural Dyscrasia, in the *Dublin Journal of Medical Science* for April, May, June, and July of this year, to which frequent reference must be made, the terms deafness and blindness are corresponding ones; but it is equally plain that the term deafness is applied in a wider and looser sense than is current in regard to that of blindness.

Hitherto the pathology of deafness has been very simple—indeed, a great deal too simple, for it is acknowledged by the common verdict of the profession not to meet the realities of the case. Authorities have hitherto confined their attention to a consideration of the various lesions of the middle ear that occasion obstruction, including the stiffening and thickening of the mucous membrane of the middle ear of Toynbee, or the now more usually employed term of proliferous deafness of Roosa; and, besides, have acknowledged the existence of a nervous deafness. That nervous deafness is a very resilient and ill-defined term can be seen from the fact that Hinton regarded it as one of the most common, and Roosa and Burnett as one of the rarest, of ear affections.

In the papers before referred to I showed how inconsistent we have been in not coördinating the pathology of the ear to that of other organs of the body, more particularly to that of the eye; and I showed also the necessity we are under to recognise what I there described for the first time as vascular deafness, and which I showed to be the most common variety of the affection. This vascular deafness I proved to owe its origin to changes undergone by the bloodvessels ministering to the nutrition of the ear, that it was a consequence of pre-existent changes in these, and that we are usually first consulted for it when there is a very slight amount of deafness present. I cannot repeat a description of the affection, and must refer my readers to the article in question for further information. It will follow from this that it is possible to have a severe ear affection with very little deafness, and, as in obstructive cases, a severe deafness with very slight structural tissue change in the constituents of the ear, and this to a much greater extent than holds good of blindness. The deafness is a great part of the latter; a very trifling feature in the early stages of the former. If, now, we leave off using the term "deafness," and speak only of the imperfections of the power to hear, it will be seen that these imperfections can be arranged in three prominent classes: (1) The obstructed hearing; (2) the exhausted hearing; and (3) the enfeebled hearing. And this paper is written in order to supplement previous remarks by giving a brief consideration to these. The treatment of ear diseases has always been regarded as unsatisfactory in the extreme. With other organs a careful interpretation of the pathological import of the various groups of symptoms which we encounter in disease has invariably led to a more precise, and consequently a more successful, application of our remedies. It will be interesting to ascertain what conclusions are allowable as to the value of treatment when we have once separated and distinguished between the various forms of what is currently known as deafness.

First, then, as to the *obstructive deafness*, or rather *obstructed hearing*. Typical examples of this are found in connexion with ceruminous impaction of the meatus and catarrhal blocking up of the Eustachian tubes. Such lesions may for years deprive the ear of its hearing power, and I am sure the statement cannot be controverted that on the whole these forms of obstruction can be easily and simply dealt with. So that it follows that, as far as these affections are concerned, disease may deprive the ear of its functions to a greater extent and for a longer time than is common with any organ of the body, and yet such disease may constitute an easily and perfectly remediable affection, much more so than is the case with any other organ. Obviously, therefore, the diseases of the ear thus far compare favourably, in a therapeutic point of view, with other organs. Correct diagnosis of obstructed hearing is formed chiefly from local examination and from the history of the case. But it is well known that these are not the only forms of aural obstruction met with; we may have to encounter an actual stiffening and thickening in the middle ear structures, or embolic impaction in the bloodvessels. These are equally intractable, but probably not more intractable than similar affections of other organs, and, besides, they are outside the scope of our present inquiry.

We now come to the *exhausted hearing*. This belongs to nervous deafness properly so called, and is to be diagnosed firstly, by the history of the case, and, secondly, by the symptoms present. Both these are very characteristic. In this respect the ear takes its place in medical science along with the spine. In the diseases of both these parts the history and the symptoms are of unusual importance to us in forming a correct diagnosis; indeed, the ear ought to be looked upon as much more an appendage of the spine than of the brain. It is probably in as great, if not greater, sympathy with the former than the latter. The history of the exhausted hearing is that of a sudden and pronounced deafness, generally attended with a sense of numbness and deadness of the ear, that comes on suddenly after an overpowering and exhausting mental strain. The condition that results seems to be one more allied to paralysis than anything else; it resembles the retention of urine that arises after a mental shock, and that is owing to paresis of the detrusor urinæ apparatus. Further, there is often a history of the patient having had similar seizures; it is therefore usual to find a history of other seizures of deafness or of temporary nervous imperfections of other organs. This exhausted hearing is, then, characterised by coming on suddenly and by occasioning a high degree of deafness in a short space of time, and also I may add by disappearing with equal suddenness. This feature is often not elicited until we have closely and earnestly interrogated our patient. So that the obstructed hearing and the exhausted hearing agree in this, that the deafness is from the first considerable and the onset sudden, and the dispersion is often equally sudden in both forms. Then as to the tuning-fork; it is well known that dulness of perosseous hearing characterises nervous deafness, and this feature is of great value in forming a diagnosis. It is, however, not an invariable or a necessary feature of the early stages of nervous deafness, and impaired perosseous hearing is certainly not in all cases to be accepted as justifying an unfavourable prognosis. Then as to treatment: while nervous deafness, like obstructed hearing, may disappear suddenly, we cannot assign the period at which its disappearance may be counted upon. This, of course, is unsatisfactory; but it is not a little encouraging to find in pilocarpine, subcutaneously injected, a most promising remedial agent, and one that, in Dr. Barr's hands, has proved rapidly remedial.[1] Gelsemium, too, has, in my hands, effected great things; and I can aver that there are a train of symptoms in every way resembling those of Ménière's disease, but in which there is a nervous history, and in which this very valuable remedy proves curative. Dr. Sydney Ringer[2] testifies to its efficacy in Ménière's disease, and I am sure it is in those cases in which nervous manifestations predominate in which it is so beneficial. My own experience, as well as a consideration of the nature of the affection, goes to prove that nervous deafness is quite as curable as are the nervous seizures of other organs. Thus far I have shown that, as with the bladder we may have

[1] British Medical Journal, June 13th, 1885.
[2] Manual of Therapeutics, art. Gelsemium.

retention of urine from urethral obstruction or vesical exhaustion, so with the ear we may have abolition of its chief function, either from mechanical, tubal, or meatal obstruction, or from widely-spread nervous exhaustion.

The third form of deafness is the *enfeebled hearing* or *vascular deafness*. This, which I have described in these papers for the first time, I have shown to arise from imperfection in the muscular coats of the bloodvessels supplying the ear, and that its onset is referable to the consequences of an irritation that has lingered, it may be for years, upon the coats of the larger bloodvessels, and which, extending to those of the ear, gradually saps from them the vigour necessary for the maintenance of the healthy activities of the organ, and this, too, without the patient being in the least cognisant of the terrible mischief that is brooding. Consequently, I look upon it that this enfeebled hearing is simply the expression of long-continued irritation that has seized upon the aural vascular parietes; that it is therefore almost invariably accompanied, whether deafness be present or not, by venous and arterial bruits, which can be readily detected by the stethoscope in the cervical bloodvessels; and that by paying attention to the condition of these blood-carrying channels we can often anticipate, and therefore forestall, the coming on of this the most intractable form of deafness. Compared with other organs this very commonly met with enfeebled hearing furnishes us with an affection more tedious of cure than are similar diseased states of other viscera; its obstinacy would seem to be principally accounted for by the peculiarly broken up character of the aural circulation. It certainly is not an incurable affection. In this disorder, therefore, speaking broadly, but in this only, we find the diseases of the ear to contrast unfavourably in point of obstinacy with those of other organs of the body; and the fact that we are in a position to predict and to forestall its occurrence more than makes up for its inveteracy when a confirmed affection. Besides, I have great hopes that, like many other affections that once were deemed incurable, its intractability will soon be a thing of the past. When both ears are affected—and it is more common to find both engaged in vascular than in nervous deafness,—I have noticed that the left is generally the deafest ear in vascular deafness, the right in that due to nervous causes; it may certainly be taken as the rule that the force of the blow is more unequally felt in nervous deafness, and that in general it is the right ear that suffers the more severely.

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DR. R. KOCH'S BACTERIOLOGICAL WATER-TEST.

BY G. BISCHOF, F.C.S., F.I.C.

ON my return from Berlin, where I had the privilege of assisting in Dr. Koch's laboratory in some water determinations by his method, I saw the paper read in June last by Dr. P. F. Frankland before the Royal Society on the Removal of Micro-organisms from Water. The outlines of Dr. Koch's test given in the paper may, in my opinion, be advantageously enlarged, not only because errors may otherwise be introduced, but because *uniformity* in the *modus operandi* even of details should be aimed at by those who take an interest in the method. This will greatly enhance the usefulness of the results obtained, and facilitate precise conclusions from these results. The following brief description of the method, as now employed in Dr. Koch's laboratory, is taken in the main from a treatise published with Dr. Koch's permission by Dr. Becker,[1] being supplemented by hints from my experience in the laboratory.

I. *Collection and transport of samples of water.*—1. A number of Erlenmeyer's flasks of 100 cubic centimetres capacity are plugged with cotton-wool and sterilised by heating in an air-bath for one hour to 150-180° C. They are used after cooling for the collection of samples of water. Pipettes, glass plates, &c., are similarly sterilised by being enclosed in sheet-metal boxes, with a tightly fitting lid of suitable dimensions, and heated in the air-bath as above. 2. When filling a flask so prepared with a sample of water, the plug of cotton-wool is carefully taken out and held between the fingers of the left hand without touching the lower part of the stopper, or turning it upwards. Some 30 cubic centimetres of the sample are filled in, and the cotton-wool is at once replaced. 3. The following precautions should be taken in filling the flasks: (*a*) From a tap or the like the water is made to run to waste for three or four minutes, and then directed into the flask, if possible, without touching its side. (*b*) From a reservoir, stream, &c., the water is collected by means of a sterilised pipette and then filled into the flask as above. 4. The flasks should be so carried during transport as to prevent contact between the water and cotton-wool. 5. As far as possible all samples should be mixed with the nutritive gelatin, &c. (II., 2), within a few hours after their collection.

II. *Examination of a mixture of the water to be tested and nutritive gelatin, spread on a glass plate.*—1. Preparation of nutritive gelatin: One kilogram of raw minced beef is mixed with two litres of distilled water in a flask, and left to stand for twenty-four hours surrounded by ice. The liquid is then squeezed by means of a suitable press into a flask, where it is mixed with 200 grams of ordinary white gelatin, twenty grams of peptone, and ten grams of common salt. After standing for a short time, the ingredients are dissolved by gently heating the mixture, which is next neutralised by sodic carbonate. It should be rather alkaline than acid. The flask is plugged with cotton-wool, and the contents are heated in Dr. Koch's apparatus for sterilising by steam[2] on two consecutive days for half an hour each day. The contents are now passed through a paper filter in a hot-water funnel, and about ten cubic centimetres of the light-yellowish filtrate filled into each of a number of sterilised test-tubes provided with cotton-wool plugs. These test-tubes must once more be sterilised by steam on each of three consecutive days for rather less than fifteen minutes. Nutritive gelatin thus prepared solidifies at the ordinary temperature, and is kept in the test-tubes ready for use. If the latter remain perfectly clear after a few days' standing, sterilisation has been complete. This can be further confirmed by a blank experiment. 2. Application of the nutritive gelatin for testing water: (*a*) The contents of some of the above test-tubes are liquefied by immersion in water of about 30° C. Mix the water in the sample flask by gentle agitation, remove the plug of cotton-wool as above (I., 2), and introduce as rapidly as possible into the test-tube by means of a sterilised pipette the quantity of water intended to be used for the experiment,[3] at once replacing the cotton-wool. The water and gelatin must now be intimately mixed by bringing the test-tube repeatedly into an almost horizontal position, imparting to it at the same time a screwing motion. It does not matter if the mixture at this stage touches the cotton-wool. (*b*) A sheet iron box is filled with glass plates which have been rinsed thoroughly and sterilised as above (I., 1). After cooling, the box is placed on its side and opened. A plate is taken out, reversed, and placed in a perfectly horizontal position on another glass plate which forms the cover of a glass dish. The latter has been *completely* filled with water and ice, and rests on a tripod, which can be levelled by means of screws. (*c*) The cotton-wool is removed from the test-tube, the open end of the latter passed once or twice through a Bunsen flame, and the liquid mixture poured on the glass plate in such manner as to form, after solidifying, as nearly as possible a rectangle, the surface of which can be readily measured, and is at least half an inch distant from the sides of the plate. Place a bell-shaped glass cover at once over the plate for a few minutes until solidification has taken place. (*d*) The plate is transferred to a moist chamber, consisting of a glass dish with a disc of moistened filter paper at the

[1] Dr. Paul Börner's Reichs-Medicinal Kalender für Deutschland, 1885, Heft ii., p. 24.

[2] The apparatus and materials referred to can be obtained from Dr. H. Rohrbeck (J. F. Luhme and Co.), 100, Friedrichstrasse, Berlin, N.W.

[3] The quantity of water to be taken for an experiment depends upon its quality. Generally two parallel samples are prepared, 1 cubic centimetre being added to the gelatine in one test-tube, and 0·5 cubic centimetre to that in another. The determination of duplicate samples is a desirable check; but in case there should be too many colonies in the sample containing 1 cubic centimetre of water to allow of their remaining *distinct*, the result of the other sample is accepted as more correct. I found such parallel results to agree as a rule very closely, even when more or less obtained by different operators. In the case of very impure water, as little as one drop may have to be taken to prevent the colonies growing together. Should this even be too much, the sample must be diluted with distilled water, which has been sterilised by heating in steam, as above, for two hours.

bottom. A glass rest is placed on the paper to support the gelatin plate, and covered by an inverted glass dish slightly less in diameter than the other, and resting on the paper. (*e*) The sample thus prepared is kept for two or three days at a moderate temperature until the colonies have sufficiently developed. A basement-room answers well for the purpose, on account of uniformity of temperature. It would probably be convenient to lay down the rule that the development of colonies be always determined after an incubation in the moist chamber of *three days;* only should there be danger, in the case of very impure waters, of the colonies growing into each other, their number must be determined on the second day, which then should be stated. The approximate temperature during incubation may be noted with advantage. (*f*) The number of colonies is conveniently calculated per cubic centimetre of water. It is determined by placing the plate after incubation on a dark ground. A glass plate, divided into square centimetres and one-ninth of a square centimetre, is so arranged on a hinge that it can readily be made to cover the gelatin plate without touching it. If there are many colonies their number is counted in some of the smaller squares, the average being calculated on the entire area of the gelatin. With few colonies the larger squares should be made use of, or indeed the colonies counted all over the plate. A lens sliding on the top of the graduated glass plate assists in the discovery of the smaller colonies. Recently glass plates have been manufactured which are provided with a slightly projecting rectangle of enamel of uniform area. I have no experience with them, but if they stand the sterilisation well, they would save the estimation of the total area, provided it be covered all over with gelatin. (*g*) Lastly, the number of *liquefying* colonies over the whole or part of the area of gelatin has to be counted, as before. These colonies are probably due to micro-organisms which are in connexion with putrefactive changes, and they are distinguished, after a little practice, by holding and moving the glass plate slightly inclined before the eye. It is of interest to note that if the figures given by Dr. Frankland may be compared with those obtained in Dr. Koch's laboratory, the general purity of the water-supply of the metropolis, as ascertained by recent analytical results, is fully borne out by the biological test. I hope to confirm this as soon as some improved apparatus, now on its way from Berlin, has arrived.

III. *Remarks on the preceding method, translated from Dr. Becker's treatise.*—1. The germs contained in the water under examination are *separated* by mixing with the nutritive gelatin. When the latter solidifies they are deposited and fixed, each becoming the centre of a colony. 2. Each distinct colony thus obtained is a pure culture, resulting from one single germ. 3. The number of developed colonies therefore bears a ratio to the germs contained in the sample. 4. Each sample of water differs quantitatively and qualitatively as to the bacterial germs it contains. Developed colonies show differences, visible even to the naked eye, in their colour, their mode of development, liquefaction of the gelatin, formation of gases, &c. 5. The micro-organisms forming each colony may be examined more minutely by abstracting a minute portion (if necessary with the assistance of the microscope) by means of platinum wire which has been previously heated to redness. Such matter is mixed with a drop of distilled water on a thin glass cover, and further treated as explained hereafter (V.). 6. Certain forms of micro-organisms are invariably found in each sample of water, and with some practice a colony foreign to it may be detected without any great difficulty. 7. Water which is rich in products of decomposition is not suitable for drinking; similarly, water rich in the agents causing decomposition is unsuitable. It is not impossible that a sample of water may appear quite unfit for drinking because it contains an unusually large number of micro-organisms, whilst chemical analysis fails to give warning. 8. The method appears peculiarly suited to the examination of the efficiency of filters, the germs in the water before and after filtration being compared.

IV. *Microscopic examination of a drop of the sample suspended on a thin glass cover.*—1. A small drop of the water to be tested is transferred from the Erlenmeyer flask by means of a sterilised pipette on to a thin clean glass cover. The latter is so mounted on the stage of the microscope[4] that the drop projects into a cavity in the slide. The margin of the glass cover may be painted over with vaseline to secure it in its position. 2. After subsidence of the sample of water in a conical glass for twenty-four hours, a drop is taken from the bottom of the glass by means of a pipette, or, should there be suspended matter, a particle is collected by means of platinum wire which has previously been heated to redness. The drop or suspended matter is placed on a thin glass cover and examined microscopically as above. 3. The object of this examination is to determine the low forms of organisms not visible to the naked eye, their motion, colour, &c.

V. *Microscopic examination of the solid residue obtained by evaporating a drop of the water under examination.*—1. A drop is allowed to evaporate on a thin glass cover under a bell-shaped cover. The thin glass cover is then taken hold of with a pair of pincers and passed about three times through the flame of a Bunsen burner. 2. A saturated alcoholic solution of methyl blue or fuchsine is prepared and diluted with distilled water until it becomes just transparent in a beaker three centimetres in diameter. The aqueous solution thus prepared is then poured over the thin glass cover, which is rinsed with distilled water after sufficient action of the dye has taken place. The glass cover is mounted with water, cedar oil, or Canada balsam. 3. A drop or particle of suspended matter is placed on a thin glass cover as in IV., 2, and next treated as in V., 1 and 2. 4. By the process of dyeing the outlines of the organisms present are rendered more distinct. Their shape and other properties have to be observed. If bacteria be present, their shape, similarity to morbific species, &c., should be noted.

Before concluding, I wish to express my thanks to Dr. Frankland for the new proof which the experiments in his paper referred to before have given of the usefulness of my labours regarding the purification of water. I had resolved, before leaving Berlin, to make a series of similar experiments, and had I been aware of the work Dr. Frankland was engaged in, I would have furnished him with indications which might have extended its scope still further.

4, Hart-street, W.C.

[4] The microscopes in use in Dr. Koch's laboratory are provided with Abbe's condensing arrangement, two to three eye-pieces and two to three object-glasses, one of which is adapted to oil immersion, $\frac{1}{12}$.

NEW WASHABLE TRUSS;

WITH REMARKS ON THE TREATMENT OF CONGENITAL HERNIA IN CHILDREN.

BY J. WARD COUSINS, M.D. LOND., F.R.C.S.,

SENIOR SURGEON TO THE ROYAL PORTSMOUTH HOSPITAL AND TO THE PORTSMOUTH AND SOUTH HANTS EYE AND EAR INFIRMARY.

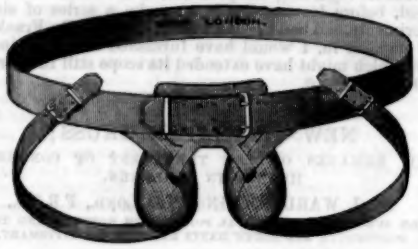
A RADICAL cure of infantile hernia can, fortunately, be obtained in a large proportion of cases by simple mechanical treatment. This, of course, involves the persevering application of some kind of truss for a considerable period, and also the unremitting and intelligent attention of the nurse. The instrument selected for the purpose ought to be of very simple construction, and be made so as to fit securely around the pelvis. It must effectually prevent the descent of the rupture, and well support the lower part of the abdominal walls. Care must be taken that it does not chafe the skin by injurious pressure in any direction, and that it is protected by some suitable material which can be readily removed whenever it becomes foul and irritating by contact with the secretions.

Now, the instruments which are generally employed in the treatment of infantile hernia do not possess all these essential qualifications; at the same time they are often costly, and are therefore quite out of the reach of the poorer class of patients. In many cases in which they are applied they are very imperfectly adjusted, and are constantly prone to get out of position. The surgeon is informed that the truss has been regularly and carefully put on, when, by a moment's inspection, he discovers that the support is really doing no good at all. Sometimes the tender skin is irritated by the pressure of the pad, and at others the truss is insufficient and allows the rupture to slip down behind it, thus causing constant fretfulness and straining, which soon issue in an increase of the protrusion. In this way mothers get much disheartened with their efforts, and the treatment is at length discarded altogether. In some cases the successful application of a truss is attended with considerable diffi-

culty, owing to the large size of the hernia and the relaxed condition of the abdominal walls; and under these circumstances, without the constant supervision of a skilled attendant, it becomes useless to anticipate any satisfactory result.

For some years past I have been on the look-out for an efficient and simple truss suitable for infants and young children, and I have tried a great variety of instruments made up of springs and pads, but, unfortunately, they have all proved in my hands very imperfect contrivances, troublesome to adjust, difficult to keep in position, liable to irritate the tender skin by pressure, and to get foul and unwholesome through constant use. By the help, however, of the new washable truss, all the difficulties which surround the management of these cases are entirely removed, and I can confidently recommend it to the notice of any of my professional brethren who are concerned with the treatment of infantile hernia.

The instrument is represented in the engraving, and consists of an elastic air-cushion, which is shaped to support evenly and comfortably the lower part of the abdominal surface, and also the inguinal region, on either side, down to the fold of the thigh. In form the cushion is caudate, with a deep notch at the lower border into which the external organs are received. On the centre of the upper border the inflating-tube is fixed. The pad is protected by a linen cover, and is securely fixed by a pelvic belt of webbing, fastened in the middle line by two surgical safety pins. The belt is held in position on each side by a narrow band, which passes through a loop attached to the lower end of the pad, and then encircles the thigh. By this light and simple contrivance, which requires no skill in its adjustment, the hernia is very efficiently kept up, and the relaxed walls of the abdomen are equally supported at every



part, without discomfort or undue pressure. It, moreover, does not require constant attention to keep it from slipping out of position. It can be easily put on and taken off by the nurse; at the same time the belt can be removed, and a clean one substituted for it, whenever it becomes soiled. A daily change of belt will be generally found sufficient with ordinary care. The new truss is made for me by Messrs. Maw, Son, and Thompson, and each cushion is supplied with several washable belts and pad covers.

The treatment of infantile hernia is thus reduced to a matter of great ease and simplicity, and, in a large proportion of cases, the persistent and careful application of the support will prove sufficient to produce a radical cure in a few months. The nurse must be directed to prevent as much as possible the reappearance of the protrusion. When washing the child she should always carefully support the whole inguinal region with her left hand. The skin must be dabbed dry with a soft towel, and dusted occasionally with a mixture of finely-powdered starch and oxide of zinc. The cushion should then be slipped under the fingers, and the belt and bands fastened on with a pressure just sufficient to prevent the descent of the rupture, and to diffuse an even resistance over the abdominal surface. The little patient is always composed and comfortable as soon as the truss is efficiently applied. Of course, in every case, the general condition of the child must be considered, and any existing disorder of the secretions corrected by remedies and appropriate feeding. Every source of irritation and straining must as far as possible be removed. The condition of the prepuce always demands special attention, and in a large proportion of my cases circumcision is a preliminary proceeding. There are, however, a few cases of severe congenital inguinal hernia which cannot be satisfactorily treated without surgical operation. The protrusions are large and tense, the abdominal parietes relaxed and the inguinal orifices distended; at the same time these unfavourable conditions are aggravated by the constant screaming and straining of the child, so that it is impossible to succeed with any sort of mechanical support. After the failure of ordinary means, there can be no doubt as to the legitimacy of surgical interference, and fortunately this can be undertaken with very little risk by the aid of strict antiseptic precautions. There are now many recognised operations for "radical cure"; but in every case, before selecting any form of procedure, it is essential to take into consideration the size of the hernia and the general condition of the system. I have performed Spanton's operation six times successfully, and it appears to me to be admirably adapted for the cure of inguinal hernia of moderate size occurring in otherwise healthy children. But in large scrotal protrusions, associated with depressed vitality and impaired nutrition, I prefer to ligature the neck of the sac, and in this way several bad cases have been very successfully treated.

As regards the management of double scrotal hernia in infants, it is desirable to perform the operation on the worst side first, and then to carefully support both sides with the antiseptic dressings. As soon as the healing process is sufficiently advanced, the washable truss and pad can be regularly applied. Recently, in two very bad cases of congenital hernia, an operation on one side resulted in a permanent cure of both sides, simply by suspending the straining of the child. When the little patient cried it was only a subdued effort, as any jerking movement of the abdominal walls excited pain in the wounded region. By this voluntary suppression the opposite rupture was kept in position, and the tendency to protrusion was slowly overcome by contraction and growth. Thus an operation on one side, followed by truss treatment, issued in a radical cure of both sides. It is a good practical rule, in all cases of double infantile hernia, to operate on the worst side, and then to try persevering support on both sides before having recourse to a second operation.

One word, in conclusion, upon the operation itself. The radical cure of even the worst cases of congenital inguinal hernia can be accomplished by the simple method of placing a ligature around the neck of the sac. Many surgeons recommend, in addition to the application of the ligature, that the pillars of the ring should be brought together. It is true that the abdominal walls are always much relaxed, and the inguinal canals widely open; still, in operations upon young children, stitching up the ring can be safely dispensed with. It is a good plan at the onset to reduce the hernia and then to expose the sac as far as the margin of the external ring, taking care to disturb the tissues as little as possible during the proceeding. The neck of the sac is now separated, gently drawn down, and secured, the vas deferens being protected by the fingers of an assistant. A little of the structure of the cord is generally involved in the grasp of the ligature, for its complete separation is a very difficult matter; yet, after all, this is of no practical importance provided the duct is not injured. The sac is then divided three-quarters of an inch below the ligature, and the lower part closed by a continuous suture of catgut, in the manner recommended by Mr. Mitchell Banks. The wound is then antiseptically dressed, and some vaseline rubbed over the outer layer of gauze, to prevent the secretions from saturating the bandages. As soon as the healing process is complete the air-cushion and belt are applied: and before the little patient is discharged from the hospital the mother is taught the way to put them on; at the same time her energy is stimulated with the assurance that her child will grow out of the trouble by careful and persistent treatment, so that in a few months the cure will be complete on both sides, without any repetition of the operation.[1]

[1] Messrs. Maw, Son, and Thomson have made the air-cushion for me in two sizes; one is adapted for children two or three years of age, the other for infants.

BEQUEST OF THE LATE DR. N. CAMERON.—It is understood that Dr. Nathaniel Cameron, who died recently at Sierra Leone, has bequeathed to the Aberdeen Museum a valuable collection of fossils, &c. Another collection, comprising fossils, shells, gold dust, &c., has, it is stated, been bequeathed to the British Museum, while to the addition building fund of Aberdeen University he has left the sum of £50.

A CASE OF

PROLONGED RETENTION TREATED BY ASPIRATION DAILY FOR FIVE WEEKS.

BY J. T. HAGUE, L.R.C.P., L.R.C.S. ED.

AMONGST instruments of modern invention, few are of more practical use in the treatment of disease than the aspirator, and one of its most generally recognised uses is for emptying of the bladder in cases of retention where a catheter cannot be passed. In such cases the choice of treatment lies between puncture of the bladder per rectum with a curved trocar and cannula—a proceeding certainly requiring expertness—and aspiration immediately above the pubes. The latter treatment is certainly easy, and, as I think, safe. At any rate the following case bears out that belief.

On Sept. 3rd last I was called to see a patient, aged ninety, who was suffering from retention of forty-eight hours' duration, due to enlarged prostate. Of course catheterisation was the treatment indicated, and this was tried most carefully and perseveringly by Dr. McGuinness and myself with both silver and soft catheters; but, partly by reason of the enlarged prostate and partly from numerous false passages, which made it almost impossible to keep the catheter in the urethra, all efforts to reach the bladder with catheters failed. Then, as it was an absolute necessity that immediate relief should be given, we decided to aspirate. That was done, and thirty-five ounces of urine were drawn off, the operation causing but little pain. On the following morning, as no ill effects were visible, it was decided to aspirate again, instead of trying the catheter, so that the urethra might recover itself, and the false passages heal, by rest. This was done, and has been repeated daily for thirty-four days, all the attempts by several surgeons to catheterise during this time meeting with failure. On the 7th October, however, I succeeded twice in passing a soft catheter. This patient therefore—an old man of ninety—passed no water per urethram for five weeks, during which period he was aspirated thirty-four times, and has had neither cystitis nor peritonitis; the only discoverable ill effect being an inflammatory thickening about the seat of the numerous punctures.

This is the third case in which I have aspirated the bladder: one case being a stricture, with acute gonorrhœa; the other, calculus impacted in the urethra. In neither of these cases, however, was it necessary to operate more than once. I have never found any ill consequence arise from the operation, and I cannot see what advantage the old method of puncture through the rectum possesses over it. It would certainly have been impossible to have repeated this latter proceeding thirty-four times.

Brixton-road, S.W.

A CASE OF

PUERPERAL MANIA AND METRITIS TERMINATING IN ABSCESS; RECOVERY.

BY THOMAS EDWARDS, M.R.C.S., L.R.C.P., & L.M.

ON April 16th of this year I delivered L. G——, primipara, aged twenty-eight, unmarried, of twins. She was at the time suffering from a slight attack of bronchitis and mental depression. I applied the forceps to the first child, there being considerable delay in its descent. She progressed favourably until the third day, when she complained of want of sleep. I gave a draught at bedtime containing fifteen grains each of bromide of potash and chloral hydrate. On the sixth day violent mania appeared. No other bad symptom being present, I gave thirty grains of compound jalap powder with five grains of calomel, and the above chloral draught every four hours until sleep appeared. The vagina was syringed out with warm carbolic water (1 in 20). On the eighth day the mania was less violent. Lochia and milk arrested; abdomen greatly distended; pain only caused by deep pressure over the uterus; legs drawn up. Temperature 105°; pulse 120. Strong mercurial ointment and turpentine stupes were applied over the abdomen; frequent and small doses of brandy were given, and a mixture containing fifteen grains of sulpho-carbolate of soda every four hours. On the eleventh day there was present bronchitis, diarrhœa, low muttering delirium, deafness in both ears, and a pinched and deathlike appearance of the face. Temperature 104° and a small quick pulse, but the general abdominal enlargement had disappeared, leaving a large hard swelling rising considerably above the umbilicus. Mustard poultices were applied to the chest, a plain starch enema given, and the lower part of the body anointed with carbolic oil after each motion. The brandy and the sulpho-carbolate mixture were continued. On the fourteenth day the patient began to improve. The temperature, however, was still high, and the abdominal swelling about the same. On the twenty-first day the improvement had continued, but the high temperature and swelling were still present. She was taking a mixture containing ten drops of tincture of perchloride of iron three times a day.

In the first week of June a large abscess pointed and discharged midway between the umbilicus and pubes. The uterus, being firmly fixed to the abdominal wall, was rapidly diminishing in size, and the patient was regaining her strength.

Harrold, Beds.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

CHARCOT'S DISEASE OF THE KNEE-JOINT; SUPPURATION IN THE JOINT; AMPUTATION OF THIGH; SECONDARY HÆMORRHAGE; LIGATURE OF THE FEMORAL ARTERY; RECOVERY.

(Under the care of Mr. CROFT.)

THERE have been few recorded cases of Charcot's disease in which suppuration has occurred, and the following case will be read with great interest. One of the most striking points in the case was the almost total absence of pain, although extensive suppuration in the joint was present, and it was only after the formation of a sinus in connexion with the joint that it was decided to amputate the limb. At the operation all the structures divided were found degenerated; there was advanced atheroma of the femoral artery, and this diseased condition of the vessel was the cause of the serious hæmorrhage which took place during the after-treatment of the case. The man's vitality was low, and the operation wounds were slow in healing. It will be observed that he suffered from a perforating ulcer of the foot of the opposite side.

J. A——, aged fifty-two, formerly a woollen merchant, now of no employment, was admitted into the Edward ward on Jan. 25th, and left July 1st, 1885. The family history was very good; his parents lived to above seventy years; six brothers and sisters living and healthy. With the exception of an operation on the right eye for cataract ten years ago, he enjoyed good health until three years since, when the present illness commenced. There was no history of syphilis. Three years ago the left knee became swollen and painful behind the joint; subsequently the leg down to the ankle became "swollen and glossy." He was treated by blistering, iodine, and rest, and recovered. Six months later he was attacked in a similar manner, and has become progressively worse, all treatment failing to do good. About two years ago a "black spot" was noticed on the under surface of the right great toe; it disappeared, however, but returned six weeks ago; the toe became painful and swollen, and soon an ulcer formed. He states that during the last three years he has found difficulty in walking in the dark.

On admission, the patient was a well-made, fairly healthy-

looking man. He had ptosis and external strabismus of the right eye, in which there was also the scar remaining from the cataract extraction. The right great toe was swollen and red, and on its plantar surface, over the position of the articulation between the phalanges, was a sloughy ulcer, three-quarters of an inch in diameter. The edges of this ulcer were sharply cut, the discharge fetid. Movement of the joint produced grating, and a probe impinged on bone and entered the joint, but did not cause much pain. There was no loss of cutaneous sensation. The left knee, which was considerably enlarged, presented a large fluctuating swelling. It extended upwards in the position of the synoval cavity of the knee-joint and for some inches down the tibia. The circumference of the knee was nineteen and three-quarter inches, and from above downwards it measured eleven inches. In the upper part its colour was that of normal integument with dilated veins over it; below it was reddened and the skin thinned, and it appeared to lay over the tibia. The patella was superficial, widened and greatly enlarged, below and to its inner side could be felt a bony plate. The movements were too free (flail-like) and attended with rough grating. There was little pain or tenderness. The temperature of the joint was higher than on the opposite side. The little finger of the right hand was contracted; attempts to straighten it made tense a cord-like structure which extended into the palm, but not beyond the annular ligament. The ring and middle fingers were also contracted, but to a less extent. A similar contraction, though to a less degree, was visible in the little finger of the left hand. The right pupil was irregular from former operation; neither pupil reacted to light nor to accommodation. The movements of the eyes, though slow, were well performed; vision was defective. There was no wasting of the muscles, but coördination was imperfect. Patellar reflex was absent. There was some incontinence of urine and decided loss of sexual power, but neither for more than three weeks. The temperature was 100·6°. There was no albuminuria. He was kept in bed, the leg being placed between sand-bags and an ice-bag applied to the joint.

Feb. 3rd.—The swelling appeared larger, bagging below the knee, the skin over its lower part being very red and shiny; the redness of the skin was limited to the lower part and did not extend to the rest of the knee. The femur was displaced forwards and outwards, the tibia being drawn backwards and inwards.

5th.—Four ounces of sanious pus removed by the aspirator, the puncture being made over the outer side of the joint.

7th.—The swelling of the joint had diminished, and there was less redness. A large bony outgrowth could be felt extending across the front of the joint below the patella.

13th.—An incision was made into the toe of the left foot and pus evacuated.

16th.—The skin had much thinned over the joint in two places, below and to the outer side.

17th.—These portions of skin gave way, and a semi-transparent fluid began to ooze from them. A poroplastic splint was applied to the foot on which the ulcer existed.

26th.—The discharge has continued, and now the swelling is almost limited to the knee. The openings are dressed with carbolic oil.

March 10th.—The larger opening was increased by incision, and a probe passed backwards was found to enter the knee-joint.

16th.—There was brisk plantar reflex in both legs, the sensation being, however, delayed in each, especially in the left, where as much as six seconds intervened between the application of the stimulus and its appreciation by the patient. In the afternoon the patient was placed under ether, and Mr. Croft amputated the thigh in the lower third by anterior and posterior flaps. The latter was cut from within outwards, but the knife encountered a long bony outgrowth, which extended from the joint for a long distance upwards in the body of the semi-membranosus muscle, which had to be divided by the saw. The femur was dense and ivory-like. The fasciæ appeared thickened and the muscles coarse. The arteries were rigid and atheromatous. The operation was performed with antiseptic precautions.

Until Feb. 4th, when the joint was aspirated, the temperature did not fall below 99° in the morning, and usually rose to 101° and on more than one occasion to 103° in the evening. After this it was better, not rising above 99·6° until the 10th, when the small incision was made. It was then somewhat irregular again. After the operation he had a good deal of pain in the stump, and the temperature rose to 105°, falling later in the day to 101°.

27th.—Progress has been quite satisfactory. The stump was dressed again; all the sutures and the drainage-tubes were removed. The wound is healing well. The temperature has been about one degree higher in the evening than in the morning, 99·2° to 100·2°.

30th.—The patient having been placed under ether, the head of the proximal phalanx of the right great toe was removed, and the base of the distal phalanx scraped. The wound was plugged with iodoform gauze and dressed antiseptically.

April 10th (twenty-fifth day).—Violent hæmorrhage from the thigh came on at night. The inner extremity of the primary incision was extended upwards, and the femoral artery secured by silk ligatures in Hunter's canal; it was divided between the ligatures. A short time before the hæmorrhage the temperature rose to 103°, having been only 95° two hours before.

11th.—The patient was weak and suffering somewhat from shock. Pulse 90, feeble; temperature 97·8°. The stump was dressed with iodoform. The patient from this date gradually recovered, but continued weak for some days. On the 26th an abscess which had been forming over the sacrum was opened, and after this had been incised the temperature, which had been irregular in character, became normal.

29th.—The abscess was healing. He took food well. Tongue slightly furred; bowels regular. Pulse 79, feeble; temperature normal. At 8 P.M. there was some hæmorrhage from the stump, but very little blood was lost, as the flow was immediately arrested. An incision was made at the apex of Scarpa's triangle, and the femoral ligatured with thick catgut (nineteen days after the last hæmorrhage and forty-four since amputation of the thigh).

From this time the patient made slow but satisfactory progress towards recovery. The wounds all suppurated, but not freely, and were very slow in healing. The wound of the foot and the abscess in the hand healed well before he left; and the temperature was normal for the last two months of his residence in the hospital, with the exception of May 1st, 18th, and 19th, when it reached 100·2°, 100·6°, and 100·2° respectively.

On examination of the removed joint, it showed well-marked disease, described as characteristic of Charcot's disease of the joint. But there was also an unusual number of bony growths around it; one divided at the time of operation extended for about nine inches up the thigh, and was as thick as the little finger.

MONTGOMERYSHIRE INFIRMARY.

COMPOUND COMMINUTED AND DEPRESSED FRACTURE OF SKULL.

(Under the care of Mr. C. E. MONRO.)

THE following case is worthy of record, especially in view of the almost complete absence of cerebral symptoms proper, although the lesion was a severe one.

R. G——, a stout, healthy, and steady agricultural labourer, in his twenty-first year, presented himself at Mr. Monro's surgery on June 18th with a severe wound over the left side of the frontal bone, about an inch above the orbit. He stated that whilst letting a horse loose in a field he was kicked by the horse with his hind legs, the tip of the shoe striking him on the forehead. On examination, there was found a large fragment of bone depressed and partially pushed up behind the edge of the frontal bone, above, there were several loose fragments. The wound was about two inches and a half in length. Strange to say, the patient was not even stunned, but got upon his feet after being knocked down, walked about 300 yards to his master's house, and rode into Newtown, a distance of over a mile. From the severity of the case, and the necessity of immediate operative interference, the patient was sent to the Montgomeryshire Infirmary.

Soon after admission chloroform was administered by Mr. J. H. Harris. The patient at the time was suffering slightly from shock. Pulse on admission 48; after chloroform 60; no vomiting. Pupils equal. He was quite coherent. Air from the frontal sinuses, with blood, bubbled out of the inner aspect of the wound. One large fragment of bone

was removed by the elevator and forceps, measuring 1¼ in. in length by ¼ in. wide, together with five smaller fragments. The brain could be seen pulsating at the bottom of the wound, and a portion of brain exposed corresponding to the dimensions of the larger fragment of bone removed. Dura mater not divided; two sutures and drainage-tube introduced; ends of wound left open. Five grains of subchloride of mercury were administered, and an ounce of compound senna mixture.

June 19th.—11 A.M.: Pulse 76; temperature 98·7°. During the night the bowels acted three times; patient quiet, not complaining of much pain; tongue clean; feels sick; pupils respond readily to light; is thoroughly conscious, and answers questions readily and without hesitation; in fact, there is a singular absence of brain symptoms.—11 P.M.: Pulse 68; temperature 98°. Is somewhat restless; complains of feeling general headache; breathing quiet, now and then inclined to be slightly stertorous. Ice-cap obtained, and ice and powdered salt applied to the head.

20th.—Noon: Pulse 68; temperature 98·8°. Head cool; no marked cerebral symptoms, excepting somewhat slow pulse; still feels sick. Wound quite healthy.—7.30 P.M.: Pulse 66; temperature 98·4°. Complains of pain.

21st.—Pulse 62; temperature 99°. Passed a restless night on account of pain. To have fifteen grains of chloral hydrate and fifteen grains of bromide of potassium every five or six hours.—9.30 P.M.: Pulse 58; temperature normal. Tongue clean; has taken very light liquid nourishment well during the day; has had several severe attacks of paroxysmal pain of neuralgic character, but relieved by the medicine; no local tenderness.

22nd.—10 A.M.: Pulse 62; temperature 99°. Has passed a restless night; tongue clean; has had several severe paroxysms of pain. There is no symptom of compression or any functional disturbance of brain. Drainage-tube removed; wound dressed with boracic acid lotion. Bowels have not acted to-day. To take two ounces of white mixture.—Evening: Pulse 64, good; temperature 98°; is restless; still complains of pain (paroxysmal); tongue clean.

23rd.—11 A.M.: Pulse 62; temperature 98·6°. Still complains of severe pain of a neuralgic character, occurring at intervals, and not now apparently relieved by the chloral hydrate and bromide. Ordered hydrate of croton chloral with gelsemium and monobromide of camphor. Sutures were removed, and wound strapped with salicylated isinglass plaster; this seemed to cause uneasiness, and was removed in the evening.—4 P.M.: Pain intense. Matron states that the patient has been at times delirious, but not so at the time of visit. Pulse 66, of good volume; temperature 99·4°; pupils equally contracted, but sluggish. To have an enema, as the morning aperient has not acted. Head to be shaved, and leeches to be applied should the temperature continue to rise, with increase of pain and delirium.—10 P.M.: Pulse 50; temperature 98·4°. Patient is not in so much pain; pupils not now contracted, but sluggish; bowels have acted freely; is not so restless, but rather drowsy.

24th.—7.30 P.M.: Pulse 55; temperature 98·5°. Patient much better; very little pain to-day; passed a quiet night; wound healthy.

25th.—Pulse 50; temperature normal. Very little pain; wound almost healed; slept well last night; pupils equal, respond well to light; tongue clean; appetite good; bowels acting well.

From this time the patient rapidly improved, occasionally suffering slight pain. In view of the statement that the convolutions of this portion of the frontal lobe were the seat of perception of colour, Mr. Monro carefully tested the patient, and found that his perception of colour was quite normal. On the 29th he was allowed to rise and to have a little solid food. The wound had quite healed. On July 15th he was discharged quite well, with a caution not to go to work for a month, and then not in a hot sun.

A LOCAL BOARD FOR GRAYS.—For some time past the question of the formation of a local board has been agitated at Grays. A poll has just been held, and has resulted in a majority of 278 for the establishment of a board. The Local Government Board have recently been paying particular attention to the whole of this district on both sides of the river, and there is little doubt that a complete drainage system will be insisted upon, especially in view of the vast increase of house property consequent upon the construction of the new docks at Tilbury.

Medical Societies.

ACADEMY OF MEDICINE IN IRELAND.

Notes of Visits to Contrexéville and Royat.—Primary Sarcoma of Right Kidney.

AT the closing meeting of the Medical Section, held May 29th, 1885, Dr. CRUISE, President, read a paper giving an account of his visits to Contrexéville and Royat-les-Bains, with some details respecting these mineral waters, and pointing out the various cases in which they are found useful. The substance of this paper has already appeared in our columns.—The Chairman, Dr. DUFFEY, noticed that the President did not allude to the silica in these springs.—Dr. TICHBORNE, having examined Contrexéville water, as imported, said the analysis was almost identical with that exhibited in the President's diagram, and therefore what found its way to this country was genuine. That was not always the case. It appeared from the analysis that chlorine was associated with iodide of potassium. But it was a difficult thing to prognosticate from an analysis what was the composition of the water, since chlorine was not originally associated with it. He was struck with the analysis of Royat water as regards the extraordinary amount of lithium—0·037, being about 2½ grs. per gallon. It was of great interest to see that the water was so rich in that particular body. He asked had sesium and rubidium been found, there being an idea that they possess qualities similar to lithia in their action.—Dr. JAMES LITTLE said he was not in a position to speak of the waters of Royat; but many years ago he had heard from Dr. Cruise of the value of the Contrexéville waters in affections of the bladder. That practical piece of information had helped him to keep persons alive with diseased bladders; and since then he had formed an opinion of these waters. Those to whom he gave the waters said they produced the effects Dr. Cruise had enumerated, and that they usually improved the appetite, kept the bowels open, and made people feel comfortable. In this country the waters appeared to be useful in that kind of dyspepsia occurring in people of a sallow complexion and sedentary habit connected with a diseased condition of the liver. In gall-stone the waters also appeared to be useful. An old London physician had told him that he gained more benefit from gout by the Contrexéville waters than any other mode of treatment. The chief virtue of the Contrexéville waters lay in their effect on the urinary organs, especially catarrh of the bladder and stone. In catarrh of the bladder he first had had an opportunity of seeing the value of the waters. It was the case of an old man in whom catarrh had arisen in connexion with imperfect emptying of the bladder through enlarged prostate. From a physician whom he met at Contrexéville, he ascertained that in giving the water for stone the best plan was to give a large quantity early in the morning before breakfast, whereas for catarrh or gout the better plan was to give it in divided portions during the day. To clear away gravel, he had recommended patients to drink a bottle before breakfast. But in catarrh of the bladder he had recommended a certain portion before breakfast, luncheon, and dinner. A few months ago he saw a lady, and, from the account she gave of the pain running down the thigh, he felt certain it was renal calculus He recommended her a six weeks' course, and at the end of that time he received from her the calculus diagnosed. With regard to Contrexéville itself, as compared with the great German baths, it was rather a sad place.—Dr. H. KENNEDY approved highly of Dr. Cruise's remarks. But a large number of persons were unable to visit those baths, and it was, then, well to keep in mind the work of Roberts of Manchester, in which, by medical treatment alone, he proved that not only could calculus in the bladder be modified, but even be brought away.—Dr. FINNY had employed Contrexéville water in some cases of bladder affections where cystitis was a common symptom; but his experience was not so good as that of those who had spoken; in fact, he was disappointed in the results. He did not find that it gave relief to the bladder troubles, nor that it improved the condition of the water in removing the mucus, as Dr. Cruise had experienced. But perhaps in this country the habits of the patient, combined with the climate and other

causes, affected the action of the water in different ways.—Dr. T. E. CAHILL having also joined in the discussion, Dr. CRUISE, in reply, said they had not sufficient knowledge of the therapeutical value of silica to attach much importance to it more than to the fluorides, or fluoride of calcium. There were no traces of sesium, rubidium, or strontium in the waters, according to Debray. With regard to the chloride of lithium in the Royat water, he was correct in the quantity given. Contrexéville was an early watering-place, closing on September 15th, after which it was not a very gay place. Dr. Kennedy's reference to Roberts' remarkable observations recalled the celebrated cures published in old times; but these were affected with soft or phosphatic calculi, and would not influence a hard calculus, such as oxalate of lime or lithic acid. Dr. Finny was not satisfied with the waters, which did not give the relief required in some cases. That was his own experience in some cases, but that was also the fate of all drugs and mineral waters. The difference in the doses for the gout proper and for cases of stone he was glad to hear.

Dr. WALTER SMITH exhibited a specimen of Primary Sarcoma of the Right Kidney, and read notes of the case. The tumour weighed nearly 4 lb., and its microscopic structure was that of a spindle-celled sarcoma. It was removed from the body of a man aged fifty-three years, admitted into Sir Patrick Dun's Hospital, Oct. 25th, 1884. His family history was good, and he was in perfect health until about two years previous, when he felt a slight pain in the right side, and soon after noticed a swelling. The tumour slowly increased in size, but he was able to work as a brass finisher up to a month before admission to hospital. The tumour extended from the ribs to within two inches of the ilium, and laterally about two inches to the left of the umbilicus. There was no ascites at any time, and the cutaneous veins, anteriorly and laterally, were permanently enlarged, forming a visible network. The fingers could be depressed readily into the grooves between the tumour and the ribs, and notwithstanding that no evidence of intestine in front of the tumour could ever be detected, the diagnosis of malignant renal disease was easily made. The urine constantly contained a considerable amount of albumen, with some tube casts, and, although usually bright and clear, always became turbid (mucin) with acetic acid. From time to time he passed, per urethram, curious tassel-like and vermiform fragments of fibrinous clots, mostly decolourised, and sometimes three inches in length. The man's strength very gradually gave way, and he died on April 14th. At the necropsy, no fluid to signify was found within the abdomen, and no evidence of peritonitis, except a few old adhesions. No part of the intestine lay in front of the renal tumour; the colon was adherent to its lower edge. The vena cava beneath the liver was occupied by a large laminated thrombus, terminating above in a blunt cone. The right renal vein was likewise filled with a soft thrombus; the left renal vein was free from clot. The liver and left kidney were in an amyloid condition. Double ureter on left side. Bladder healthy. Thoracic viscera healthy, except for a mass of caseous glands behind the bifurcation of the trachea. No vestige of healthy renal tissue could be made out in the tumour, which was enveloped in a loose capsule of connective tissue. The right ureter was pervious, not dilated. The pelvis of the kidney was filled with a firm, fibrinous plug. The right adrenal was loosely attached to the tumour. The tumour upon section exhibited a mottled, patchy appearance, and was intersected by numerous fibrous bands. Under the microscope it proved to be a spindle-celled sarcoma.—The PRESIDENT said the case was remarkable for its rarity, many of the profession having passed through a long life without seeing more than one or two.—Dr. HENRY KENNEDY said he had never seen it in the adult, though he had seen six cases in children. Walsh, in his celebrated book, mentioned the fact of strumous disease co-existing with malignant disease. The strumous glands most probably appeared early in life, while the malignant disease was of subsequent growth. It was scarcely compatible that the two should grow together. It was also questionable whether hæmorrhage was a direct symptom of the disease. In the case of the children he had seen it was not present.—Dr. JAMES LITTLE said he never saw a case of cancer of the kidney, but he emphasised the fact mentioned by Dr. Smith of the great importance of noticing the condition of the colon in the diagnosis of renal tumours.—Dr. FINNY, having seen Dr. Smith's case, confirmed what he had stated about the position of the ascending or transverse colon; but the peculiarity here was that it did not pass in front, but below the tumour. That was the difficulty. A short time ago he had a patient in hospital in whom it was easy to define the descending colon passing over the tumour, and his colleagues concurred with him that the tumour was a renal one. Another point in Dr. Smith's case was that the handling of the tumour gave little pain, and it seemed to be only troublesome from its great size and position. There was a distinct rounding of the kidney in the early stage. Afterwards that growth evidently became involved in the general mass, resulting in one continuous large tumour. The illustration of the presence of mucin, and the peculiar objects passing down from the urethra, gave the case additional interest.—Dr. WALTER G. SMITH, in reply, said he was almost disposed to envy Dr. Kennedy's exceptional experience of the disease. He was not aware that anybody in Dublin had seen so many cases of the disease, even in the early period of life, whereas it was well known one-third occurred in the first decennium of life and the remaining two-thirds in later life, the period from ten to twenty-five having almost an immunity from malignant disease of the prostate or kidney. He did not think that Dr. Little or anyone could lay too much stress on the importance and generality of the rule of the existence of intestine in front of the tumour. It was a singular circumstance, but by no means peculiar to his case, that there was a comparative absence or slight degree of pain, the disease being a slow infiltrating affection.

On the motion of Dr. DUFFEY, seconded by Dr. M'SWINEY, the remaining papers were referred to the Council for publication.

CAMBRIDGE MEDICAL SOCIETY.

Unilateral Disseminated Cerebro-spinal Sclerosis.—Diabetic Coma.

AT the meeting held on the 3rd ult. Dr. LATHAM showed a patient suffering from Unilateral Disseminated Cerebro-spinal Sclerosis. He was forty years old, married, and an engine-driver. Family history good. No previous history of alcoholism or syphilis. His present illness began about two years ago, when it was observed that his speech was thick and that he had difficulty in getting his words out. In July, 1884, involuntary twitchings were noticed in his right arm; but he continued at his work as a driver of a goods train till December, when after working on a cold night his symptoms were much aggravated. The movements have been confined almost entirely to the right side, but once or twice the left side has been affected. He has had "pins and needles" at times in the right leg and foot. In the last six months his memory has perceptibly failed. The patient is a healthy-looking man; speech thick and drawling. He dreads "coming to want," and about six months ago was under the erroneous impression that he had passed his urine in the bed several times. He suffers from giddiness and mental depression. The left pupil is slightly dilated, and both react to light; no nystagmus. Eyesight good. The tongue trembles when protruded, and his food is apt to go the wrong way. There is well-marked tremor of the right hand, the movements being rough and exaggerated on attempting motion and especially any fine work. The movements have been noticed during sleep. All reflexes about the arm are much increased. Sensation good. There is tremor of the right leg. Patellar reflexes much exaggerated, and ankle clonus on the right side. No fibrillary twitchings or lightning pains. The patient has perfect control over the sphincters. Sensation normal; urine normal. Dr. Latham said the patient was taking at the time ten-grain doses of iodide of potassium three times a day, and with some advantage. Perchloride of mercury had been tried, but under its use the symptoms were decidedly intensified. The case was interesting in connexion with the one recently reported by Dr. Duckworth in THE LANCET of May 16th, 1885.

Mr. MARTEN was able through the kindness of Dr. Latham and Dr. MacAlister to bring forward two cases of Diabetes, ending in coma and death, which had occurred at Addenbrooke's Hospital during the month of March of this year. Case 1: J. W——, aged fifteen, labourer, was admitted under Dr. MacAlister on December 3rd, 1884, for diabetes, and died comatose on March 8th, 1885. His father died of diabetes and phthisis. His illness began in July, 1884, with thirst,

ravenous appetite, polyuria, confined bowels, and loss of flesh. On admission he was noticed to be a spare boy, with dry skin, great hunger and thirst, and slight cough. Some consolidation at apex of right lung. Urine: sp. gr. 1041, sugar, acid, no albumen. He was treated with codeia and cod-liver oil, but with little result, as the sugar used to average about 86 grms. in 100 c.c. of urine; he passed as a daily average 150 oz. of urine. On March 6th he was noticed to be getting languid, and the urine diminishing in quantity (56 oz.), giving no reaction to Fehling's solution, but with ferric chloride a reddish-brown transient discolouration takes place. The evening note is: He is much weaker; pulse hardly to be felt; complains of great shortness of breath, but is breathing 24 a minute, taking long sighing inspirations and expirations, and complains of pain in hepatic region. On the 7th he was unconscious; breathing still deep and sighing; pupils dilated. Urine still gives no reaction with Fehling's solution; sp. gr. 1036; gives the red-brown temporary reaction with ferric chloride. On the 8th he regained consciousness a little; breathing very deep, but still complains of shortness of breath; no sugar in urine. He died at 3.30 P.M. The necropsy by Prof. Roy showed a slight caseous mass at the right apex of the lung and slight fatty change in the liver. Case 2: B. B——, female aged twenty-two, was admitted under Dr. Latham on March 7th, 1885, for diabetes, and died comatose on March 10th. There was no family history of diabetes; was in the hospital under Dr. Paget in 1881, but had no sugar then in the urine. The present illness began in March, 1884, with thirst, ravenous appetite, polyuria, and constipation. She is a thin girl; skin dry and tongue glazed. She has an enlarged thyroid gland, and suffers from palpitation, but no bruit detected. Urine: sp. gr. 1030; no albumen; sugar 6·8 grms. in 100 c.c. of urine; gives a purplish-red colour on the addition of ferric chloride. On the 9th the breathing became very sighing and noisy, and she complained of great pain in the epigastric region. Bowels opened by enema. On the 10th she continued to get worse, with very noisy breathing, gradually becoming unconscious, and dying about 4.30 A.M. The necropsy revealed fatty kidneys, and slightly fatty and cirrhotic liver. Mr. Marten said the above cases were typical as far as the coma was concerned, and this appeared to be the commonest mode of death in this fatal disease, more especially in young adults. The condition into which these two patients passed before death had been well described by Kussmaul, and went by the name of Kussmaul's coma, the characteristic symptoms being: the gradually increasing coma; the peculiar sighing breathing, which, though deep, still leaves the patient short of breath; the great abdominal pain, unaccounted for post mortem; and occasionally a sweet odour of the patient's breath, said to resemble acetone. The question arose as to what caused these well-marked and peculiar symptoms. As far back as 1857 Petters discovered in the urine of dying diabetics a substance which is either acetone or else closely allied to it; but how glucose circulating in the blood becomes converted into acetone—if it does so—is still an open question. There are serious objections to its being acetone, for where there has been a strong acetous odour about the patient, yet no acetone has been detected in the fluids of the body. Large doses of acetone have been given without producing the coma, although they have produced well-marked physiological symptoms; but Dr. Foster and Dr. Saundby, of Birmingham, have produced comatose symptoms in rabbits with acetone. Cornillon and Mallat have found acetone in the urine, and yet failed to find it in the blood; how could it produce these symptoms if not circulating in the blood? Acetone may be present in the urine, and yet the patient not become unconscious. The above points seem to show that acetone is not necessarily the cause of the coma, but some change in the glucose must take place, as seen in the above cases; when the ferric chloride reaction appears, the urine occasionally fails to give the Fehling reaction or any other reaction for sugar. Dr. B. Foster thinks the intense dyspnœa is due to the lipæmic condition of the blood so often found in diabetes after death. The causation of the coma seemed to be various; it generally followed some slight injury, overfatigue, mental worry, or sudden change from an ordinary to a restricted diet. The ferric chloride reaction makes the immediate prognosis very grave, although the coma at times has been known not to follow. It must also always be remembered that diabetes is sometimes successfully treated with salicylates which give the same reaction as the supposed acetone. With regard to treatment, as a rule, when once the coma has appeared very little can be done; but Dr. B. Foster recommends opium in one-grain doses, and has himself treated a case with success.—Dr. MACALISTER remarked that there were many difficulties in the way of establishing the connexion of acetone with the peculiar intoxication of diabetic coma. (1) The fugitive ferric chloride reaction was not decisive of the presence of acetone in the urine; many other substances answered to the same test. (2) Acetonuria, even when proved to be present, was not the same thing as acetonæmia. (3) It was not proved that even acetonæmia was a toxæmia—that is to say, that acetone actually in circulation could give rise to the peculiar toxic symptoms in question. He had no doubt the deep sighing respiration, which could hardly be called dyspnœa proper, was due to some irritant poisoning of the respiratory centre; it was nervous, not pulmonary. In the case under his care, a temporary improvement in the patient's pulse, respiration, or mental condition had followed the subcutaneous injection of atropia.

Reviews and Notices of Books.

Von Ziemssen's Handbook of General Therapeutics. In Seven Volumes. Vols. II. and III. London: Smith, Elder, and Co. 1885.

SOME weeks ago we found it necessary to comment somewhat unfavourably on the first volume of this work. We are glad to state that the second and third volumes just issued contrast advantageously with their predecessor. The second volume comprises three essays or articles: the first, on Antipyretic Methods of Treatment, by Professor C. von Liebermeister; the next, on Antiphlogistic Methods of Treatment, by Professor T. Jürgensen; and the last, on the Epidermic, Endermic, and Hypodermic Administration of Medicines, by Professor A. Eulenburg. The translation has been entrusted to Professor Matthew Hay, of Aberdeen, whose high reputation as a pharmacologist is a sufficient guarantee that those portions devoted to treatment are efficiently rendered. We must confess, however, that Liebermeister's chapter on Antipyretic Medicines seems to us to be wofully behind the times. A certain amount of information is given respecting the action of quinine, digitalis, alcohol, veratria, and salicylic acid; but all the more recently introduced remedies are passed over in silence, or are dealt with in the most cursory manner. On turning to the list of papers placed at the head of the chapter, we find no reference to any publication of later date than 1878. This anomaly has clearly been felt by the translator, who has found it necessary to insert at the end of the book an additional "note" on some new antipyretics. This is in reality a very complete article, giving a great deal of useful information about quinoline, kairoline, antipyrin, kairine, and other drugs now in common use. The knowledge displayed is far in advance of that to be met with in other parts of the work. It is an admirable essay on a difficult subject, and is worthy of separate publication. The chapter on Transfusion, by Jürgensen, is worth reading, but we must confess to a feeling of disappointment at finding that, although arterial and venous transfusion are fully treated, there is not a word on intra-peritoneal injections, a subject which was fully discussed in THE LANCET long ago. The article on Epidermic, Endermic, and Hypodermic Injections is decidedly disappointing. For example, although Savory and Moore's gelatine discs are described and even figured, no mention is made of the employment of the compressed tablets which are now so extensively used all over the world. Professor Hay gives a note of some half dozen lines on the value of the hypodermic injection of cocaine, but it is a subject which the author entirely ignores. Under the head of Digitalin we are glad to see that the translator mentions that many active principles derived from other plants than the foxglove have been found to possess a similar action, strophanthin and antiarin being especially

noted. The third volume, consisting of some 760 pages, is devoted entirely to an article on Respiratory Therapeutics, by Professor M. J. Oertel, of Munich. It is astonishing that in a work of this size no reference is made to the value of the ipecacuanha spray in the treatment of chronic bronchitis. The translation has been well done by Dr. Burney Yeo, but the notes are not very numerous. We are sorry to find that the publishers still think it necessary to send out the books with uncut edges. We trust that in the case of future volumes arrangements will be made with the authors of the various articles to bring them up to date.

Comparative Physiology and Psychology. By S.V. CLEVENGER, M.D., Special Pathologist, County Insane Asylum, Chicago. Jansen, MacClurg, and Co., Chicago. 1885.

THIS work is the outcome of an endeavour "to elaborate as far as possible a practical mental science which will reconcile the observations of anatomists, psychologists, and pathologists, with direct reference to the more intelligent treatment of insanity." The idea is a good one; and Dr. Clevenger has here laid the foundations of what may hereafter develop into a stately building. He commences by boldly advancing the opinion, which in the first quarter of the present century was the source of so much trouble to William Lawrence, that mind is essentially the expression of chemical energy, and that it is to be investigated in precisely the same way as any other branch of physical research. He commences with the consideration of the Amœba, its characters, properties, and habits of life, and attempts to prove that "locomotion and prehension in the amœba are due mainly to extrinsic forces operating immediately upon the organism," in this respect differing from the same phenomena in the higher animals, in which they are due chiefly to intrinsic forces, though even in these the extrinsic remain the remote causes of motion in all animals. We fail to see the reason of this distinction, and should be still disposed to hold that the movements of the amœba are due essentially to internal changes. We believe that in the purest possible water, with perfectly uniform temperature—in fact, with homogeneous environment—the amœba would still protrude its pseudopodia, would still effect movements of locomotion. Dr. Clevenger's fundamental proposition leads him to the conclusion that "chemical affinity is the prime cause of assimilation." Locomotion is only a form of the latter due to the former as a direct cause, but accidentally aided and often interfered with by other similar natural forces." We do not see our way to accepting locomotion as a form of assimilation, even in the amœba. In the next chapter he discusses the genesis of the several organs, and devotes a good section to the reasons why valves appear in certain veins and are absent in others. He considers the mode of origin of nerve and muscle cells, and gives some suggestion of rather fanciful diagrams of the process. He then traces the development of the nervous system and its function, a section that is followed by numerous quotations and condensed extracts from the writings of the foremost physiologists and biologists. The inquiry is finally limited to man, and the author endeavours to show the nature of his primary and derived activities, and to explain their operation and application. The work is carefully and intelligently written, and is worthy of expansion into a fuller and more detailed treatise.

School Hygiene and Diseases incidental to School Life. By ROBERT FARQUHARSON, M.P., M.D. Edin. Pp. 368. London: Smith, Elder, and Co. 1885.

THIS is a work which may be studied with advantage by all schoolmasters, and by parents who have children to be educated. Dr. Farquharson justly observes that "parents should cease to select their schools solely on account of the eminence of the head-master and staff, or of the successes gained in the arena of competition, but should look very carefully and narrowly into all sanitary arrangements, and be very much guided by the completeness of these." He treats the subject of school hygiene (under the headings of school buildings, diet, work, play, the duties of the school doctor, and school diseases) with the great advantage of practical knowledge acquired during the three years he held the post of medical officer at Rugby. Under "school work" he discusses the question of overwork, and, while showing that the risk from this is very small in the higher class of schools, he inculcates the necessity for a careful watch being kept, especially at the period when the boys are being prepared for any of the numerous competitive examinations which seem now to guard the entrance into the various branches of the public service. He also points out the risk arising from over-pressure, combined with under-feeding, in Board schools, and especially among the children of a town population.

The principles laid down on the subject of "school diet" appear to be very sound and to merit careful consideration on the part of all entrusted with the training of the young, although in some of the details the author does not appear to be quite free from what he terms mothers' "fads and fancies about the feeding of children." On one point we most cordially agree with him, that "it should be a law, unalterable as those of the Medes and Persians, that no work should be done on an empty stomach. Some light nourishment, such as a cup of coffee or glass of milk, should be made compulsory, and it should be the duty of someone to see that the boys really take it, and do not shirk it on occasions when they are rather more hurried than usual over their dressing operations."

We consider the chapter on "school play" a valuable one for parents and masters, and the advice given in it as to the physical training both of boys and girls is very judicious. The risks connected with some of the more popular amusements, as cricket, football, boating, gymnastics, &c., are fairly discussed, and the advantages derived from them well stated. The chapters on the "duties of the school doctor" and on "school diseases" contain many valuable suggestions for medical men who are in any way connected with schools. The advice given is sound, and the relations between the medical officer and the educational staff are well defined. We have but one fault to find with the book—the want of a good index, which would greatly enhance its value, and which we trust will be added should it reach a second edition.

SOUR MILK IN ATONIC DYSPEPSIA.

To the Editor of THE LANCET.

SIR,—I should like, with your permission, to draw attention to the remedial effects of a very old and well-known fluid.

I find that sour milk is a good remedy in many cases of atonic dyspepsia, or, at all events, it is a good adjuvant in the treatment of slow digestion where flatulence and a sensation of cramp in the stomach are prominent symptoms. The good effects of sour milk were casually discovered by me some months ago, and since then I have prescribed it with satisfactory results in many cases of indigestion. If the curd of the milk should disagree with a patient, it should be strained off, and the whey can then be given, or taken a short time after meals, warm. A gentleman who suffered much from flatulence and other disagreeable symptoms after meals can now keep himself free from them by drinking, half an hour or so after eating, a tumblerful or half a tumblerful of ordinary cold sour milk, which to him is a most agreeable beverage. I believe the efficacy of sour milk in atonic indigestion is owing in a great measure to the lactic acid which it contains, which acid some physiologists say is one of the ingredients of the gastric fluid.—Yours, &c.,

W. O'NEILL, M.D., M.R.C.P. Lond., &c.

Lincoln, August 24th, 1885.

THE LANCET.

LONDON: SATURDAY, AUGUST 29, 1885.

ONE of the great problems in medicine is that of Infantile Diarrhœa. It is understood to be engaging the anxious attention of the Local Government Board. The Board has devolved it, for investigation, on Dr. BALLARD. It could not have placed it in the hands of any of its medical staff more likely to do it justice than this gentleman. Whatever Dr. BALLARD does he does heartily and thoroughly, and in such work as this he is peculiarly at home. We owe to him one of the earliest and most powerful demonstrations of the transmission of typhoid by milk. Whatever is yet to be ascertained about the fatal forms of infantile diarrhœa, this much is already certain, that they present some features of congeniality with those of typhoid, especially in the sphere of etiology and pathology, though of course with manifold points of difference. Dr. BALLARD, too, is the author of a classical paper in the Medico-Chirurgical Transactions on the Influence of Weather and Season on Public Health, made upon 217,000 cases of sickness newly occurring, &c., during the nine years 1857 and 1865. It may well be, then, that the profession looks forward with much interest to the results and conclusions of Dr. BALLARD's investigations; the more so that this subject has perhaps scarcely received from English physicians and pathologists the amount of attention which its importance, as one of the most significant and deadly and at the same time frequent diseases, demands.

Pending Dr. BALLARD'S report every contribution to our knowledge is acceptable. We have before us one from Dr. E. W. HOPE, assistant medical officer of health for Liverpool. Dr. HOPE'S valuable paper, together with the report of the discussion which followed, is contained in the *Liverpool Medico-Chirurgical Journal*. But it is published separately, and will well repay a careful perusal. Before giving in brief the main facts which he extracts from an investigation of fatal cases, we may notice an incidental statement as to the duration of life in illegitimate children. He alleges that of these only about 10 per cent. reach maturity—a statement which shows an amount of practical infanticide that is little creditable to us as a Christian nation. A large proportion of the deaths of such children is produced by diarrhœa.

The points in connexion with 634 fatal cases which occurred during the autumn months of 1883 and 1884 were briefly as follows. The great majority of the cases occurred among the poor, chiefly amongst the very poor. The symptoms were very uniform. Though the illness generally appeared to begin quite suddenly with copious and continuous vomiting, yet a careful inquiry showed that a premonitory diarrhœa, insufficient to cause any anxiety to the mother, had existed for two or three days previously. Dr. HOPE properly says that the constancy of this symptom gives it considerable importance. Relapses are frequent, and often fatal. In 60 per cent. of the acute cases, other members of the family, and most frequently the young children, were suffering more or less severely from similar symptoms. Convulsions were common in both acute and chronic cases. No less than 63·3 per cent. of the total cases were insured in clubs. In the majority of cases the duration of the illness was under seven days. The age at death is important, and was as follows: of the 634 fatal cases, 470 were under one year, 128 from one to two years, and 36 from two to five years. Thus it is seen that the great majority of fatal cases took place within the first year of life. Most of these occurred within the first half-year of life; thus, of the 470 cases occurring under one year of age, 323 were under six months, and of these 172 were under three months. Thus the largest number of fatal cases was in the first three months of life. The summer and autumn months are the time when these cases chiefly occur. It must be allowed that these months are trying to the youngest children in any class of society; but the deadliness of them is great in those classes whose condition is poor and whose surroundings are insanitary. Like all previous investigators, Dr. HOPE finds in filth, in putrefactive or fermentative changes, favoured by high temperatures, powerful factors, and attributes to these factors an increase in the mortality from infantile diarrhœa in the month of October as compared with June, though the temperature was lower, and there was an increased rainfall. Such is the influence of social conditions and surroundings, that in two wards in Liverpool of nearly equal population—Scotland ward and West Derby ward—the actual annual average of deaths of infants from diarrhœa is more than double in the poorer ward, though the number of infants is greater in the well-to-do ward. Comparing similarly other wards, the deaths are found in the proportion of five to two. In the great majority of the fatal cases the children were fed artificially—that is, had other food than that of the breast alone. Only twenty-eight of the 634 cases were fed by mothers' milk. "Breast and food," or "bottle and food," was the ominous mixture which proved so infanticidal; most of the "foods" were starchy in their nature.

Dr. HOPE'S interesting account of this disease is formulated from the point of view of the officer of health. Dr. STOCKER very naturally asked for pathological facts. Unfortunately they were not forthcoming, and, still more unfortunately, he withheld information of his own on this aspect of the question, though he said that he had made 500 post-mortems, which in only one revealed a case of simple diarrhœa. The fact seems to be that these cases—we mean cases of fatal diarrhœa of infants—are by no means so simple as we are apt to believe. A large number of them are cases of enteritis of the ileum or colon, but especially of the colon; at least, this is so in the United States. One of the very best accounts of the lesions found in such cases is that by Dr. J. LEWIS SMITH of New York, in his admirable work on "Diseases of Childhood." These diseases are very common and very fatal in the large American cities. In cases of simple diarrhœa there may be only a catarrh of the mucous membrane, with little to see pathologically; but Dr. SMITH gives it as his opinion that the 1500 fatal cases of so-called "cholera infantum" reported in New York every summer are, with now and then an exception, cases of inflammation generally protracted. The colon was inflamed in eighty out of eighty-one cases, and in eighteen the

mucous membrane was ulcerated. We want some careful pathological investigations in this country of these cases. The tender age of the patients and their obscurity are too apt to blind us to a mortality which is discreditable and which is highly significant of unhealthy conditions which in these cholera days may have unpleasant consequences. Dr. HOPE is of opinion that much of the mischief arises from sheer parental ignorance, and suggests the creation of a staff of trained women to co-operate with midwives and nurses, and we presume parents, for the preservation of infant life.

THERE are certain groups of nervous symptoms which are met with under various circumstances that have long baffled the scientific physician. Acute yellow atrophy of the liver, phosphorus poisoning, and an acute form of diabetic coma belong to the class to which we refer. There are many other affections related in some way to marked disturbance of the liver, but the nervous phenomena to which we refer are generally regarded as evidences of a toxæmia, probably the immediate result of the hepatic disorder. The cause of diabetic coma has become associated with the employment of the terms acetonæmia, acetonuria, and diaceturia. It has been found by experiment that acetone does not exist free in the diabetic blood, but that it is formed from the body known as ethyl diacetate. Dr. RALFE has adduced evidence, which may be read in the Pathological Transactions for 1883, to show that the immediate antecedent of acetone is aceto-acetic acid. Moreover, many of the morbid phenomena of diabetes may be explained on the assumption that the toxæmic state is one of acidity. This point of view of one form of diabetic coma brings it into relation with the symptoms and morbid anatomy of poisoning by oxalic acid, tartaric acid, and bile acids.

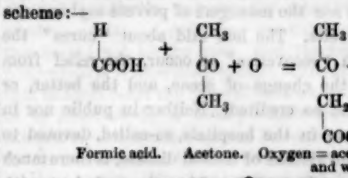
A careful study of the chemistry of acetonuria and diaceturia has recently appeared by Dr. R. VON JAKSCH.[1] Ancient observers noticed that the urine in acute diseases sometimes had a peculiar ethereal odour; the urine of measles was said to smell of freshly plucked geese, and that of small-pox to reek of mice. But these were merely empirical facts. The history of acetonuria is believed to have begun in 1857 with the observation of PETTERS on a case of diabetic coma. In 1860 KAULICH published in the *Prager Vierteljahrsschrift* (xvii., Band 3) an article on the formation of acetone in the animal organism. PETTERS and KAULICH believed that the acetone which they distilled from the urine had been formed in the intestines as the result of an abnormal fermentation of the sugar there; and these observers also argued that in many other diseases which were attended with digestive disturbances bodies like acetone might be found in the urine. BETZ, in 1861, worked at the subject more from a clinical point of view. He thought that the seat of the manufacture of acetone was the oral cavity, because the breath smelt of acetone in cases of measles, small-pox, scarlet fever, and other diseases in which the mucous membrane of that cavity was affected. Three years later CANTANI described four types of "acetonæmia." The first type was made to comprise those cases in which no nervous symptoms were present when the breath smelt of acetone. The second type was attended at first with symptoms of general bodily and mental depression; later on paralysis of some groups of muscles was to be observed, such as dilatation of pupils, incontinence of urine, paralysis of intestinal action, diminished sensibility of the skin, and the like; sometimes pyrexia was present. The symptoms of the third type were restlessness, insomnia, hallucinations, noises in the ear, giddiness, delirium, narrowing of the pupils, and retention of urine. The fourth type was mainly characterised by deep narcosis and coma. GERHARDT, in 1868, gave a fresh impulse to the study of acetonuria, and inaugurated that of diaceturia, by the observation that the urine of diabetics sometimes gave a red colouration with ferric chloride. A point to which R. VON JAKSCH refers is the discovery made by LIEBEN, in 1870, of the fact that many organic bodies, such as acetone, alcohol, aldehyde, &c., give rise with iodine in an alkaline solution to the production of iodoform; and LIEBEN said that this test was more sensitive for aldehyde and acetone than for alcohol. He also endeavoured to show that alcoholism was associated with the presence of these bodies in the urine. LIEBEN also detected substances in the urine of dogs and horses, which he regarded as aldehydes or ketones. KRUSKA, in 1873, published the results of some experimental researches that he had made with a view of ascertaining the effects of the action of acetone on the animal organism. Frogs placed in an atmosphere of acetone became comatose. Rabbits were stupefied by a dose of six cubic centimetres. A guinea-pig that had stayed a quarter of an hour in an atmosphere of acetonic vapour experienced no ill effects. KUSSMAUL published his well-known work in 1874. As the result of experiments on man and animals, he concluded that acetone possessed intoxicating and anæsthetic properties. He taught that the proofs of the presence of acetone in the blood was still wanting, and that it was not to be detected in the urine of all diabetics. Two years later MARKOWNIKOFF separated considerable quantities of acetone from diabetic urine. During recent years many workers have contributed their share to the advancement of this branch of knowledge. The question of the presence of acetone in the organism under physiological conditions is one of considerable interest. HUDSON FORD, many years ago, concluded from careful observation that the organs of animals contained alcohol. RAJEWSKY has worked at the subject; and R. VON JAKSCH has discovered in animal tissues, blood, and fæces, bodies yielding the iodoform reaction, which he regards as probably acetone; and he brings forward various observations tending to prove that a physiological acetonuria exists. The presence of acetone in the tissues, secretions, and excretions of the body under pathological conditions is of equal interest, and naturally follows the consideration of the physiological occurrence—if, indeed, any sharp distinction can be drawn between the two. R. VON JAKSCH believes that febrile acetonuria, which occurs under a variety of circumstances, should be regarded as a special form of pathological acetonuria. He asserts that all processes that are attended with high continuous fever may lead to an increase in the discharge of acetone by the urine. He has also detected acetone in the urine of patients suffering from carcinoma, but in whom there was no emaciation. In many wasting diseases he has acertained that acetonuria is present, and he has investigated with similar positive results the urine of insane patients. It is almost needless to say that the amounts of

[1] Ueber Acetonurie und Diaceturie. Berlin: A. Hirschwald. 1885.

acetone in these instances were but small. The experiments of BUHL, ALBERTONI, and PENZOLDT leave no doubt on the subject of the poisonous nature of acetone when this body is present in sufficient quantity. From his experiments VON JAKSCH comes to the conclusion that acetone is not formed during the alcoholic fermentation of sugar, though it is evolved when the lactic acid fermentation takes place. He regards it as possible that some cases of auto-intoxication by acetone may arise as the result of a lactic fermentation going on in the small intestines rather than in the stomach. He has also found by GUCKELBERGER'S method that acetone is formed together with other products of the action of oxidising substances on albumen.

The second part of VON JAKSCH'S work deals with the occurrence of diaceturia, which is worked out in the same methodical fashion as acetonuria. By diaceturia is meant the occurrence of aceto-acetic acid in the urine. An interesting conclusion that has been arrived at is to the effect that all cases of acute febrile disease in adults in which aceto-acetic acid has been shown to exist in the urine have run a very severe course. Of four cases of typhoid fever in which diaceturia existed, three died in the first week and the fourth recovered after a serious illness. The interest that attaches to these observations arises from the consideration that it is possible that some of the morbid phenomena of the fatal cases may in some way be related to the diaceturia, seeing that RALFE and others have regarded acidity of the blood as playing an important *rôle* in the production of symptoms in cases of acute poisoning by oxalic acid, &c. VON JAKSCH has also observed a rich discharge of aceto-acetic acid in a case of miliary tuberculosis, in which high fever and delirium ended in death within a few weeks. Although diaceturia is frequent in children, it does not appear to have the grave significance that it possesses in adults. Dr. VON JAKSCH is of opinion that diaceturia is found only in diabetes that has already made considerable progress, and in which the patients are much wasted. Diaceturia and glycosuria were found by him not to be coincident, for he has observed marked diaceturia whilst the glycosuria was slight. According to him, also, diaceturia is frequently found in children as the expression of an auto-intoxication. And he is inclined to regard the convulsions of infants as related to an auto-intoxication in which diaceturia exists. When acetone appears preformed in the urine, the term acetonuria is strictly correct, but acetone may develop in the discharged urine from the decomposition of aceto-acetic acid. Four propositions are drawn up by VON JAKSCH, as follows:—1. There are great clinical as well as chemical differences between acetonuria and diaceturia. 2. Rarely acetonuria gives rise to a group of symptoms resembling those to which KUSSMAUL'S name is given, and very rarely does death follow from a comatose condition. 3. Diaceturia is frequently associated with marked coma and death; to these cases the term "coma diaceticum" is applied. 4. KUSSMAUL'S complex of symptoms may occur in the absence of diaceturia and acetonuria.

With regard to the source of acetone, VON JAKSCH believes that it is the result of the metabolism of albuminous bodies, and that pathological acetonuria should be regarded as a sign of increased destruction of the tissues of the body. As to the origin of aceto-acetic acid in the urine, he suggests that when the quantity of acetone formed during the oxidation of proteids is greatly in excess, it comes into union with formic acid (also a side product of the destruction of proteids), and forms aceto-acetic acid according to the following scheme:—



Formic acid. Acetone. Oxygen = aceto-acetic acid and water.

THE discussion now in progress as to the comparative usefulness of private and public asylums as houses of cure for the insane is not likely to throw much light on a subject of great practical interest. It is impossible to measure figures which do not agree, in representing the same facts, by a common standard. The cases received at the one class of institution differ widely from those received at the other. It is not alone that the inmates of public asylums are placed under treatment earlier in the course of their maladies than the inmates of private asylums, or the reverse; nor is it that they are taken for the most part from different classes of the people. The differences are greater and deeper than these. There is a false premiss in all the arguments about "insanity" based on figures which, strangely enough, the more erudite members of the specialty seem to overlook fully as much as the less skilled in statistics. They both speak of "insanity" as though it were a disease, instead of being, as it is, one symptom or effect of diseases as various as those falling within the range of general medicine. It is as illogical and idle to talk of statistics of insanity as it is to speak or write of statistics of pain or "indigestion," or "sleeplessness," or any other results, positive or negative, of disease or disturbance. Unfortunately this fact is not perceived. "Insanity" is regarded, and, what is worse, treated, as a disease, with the consequence that not only are patients unhelped who might be "cured," but the *recoveries* happening in connexion with divers manifestations of mental derangement are claimed as cures, whereas they have, certainly very seldom in asylums, and rarely enough in licensed houses either, the least relation to treatment, and are in no way describable as cures. It may be taken as true that more "recoveries" take place in public asylums than in private. This is due not to the superior character of the treatment, but to the fact that the class of patients admitted to public asylums are ill fed and either hard-worked or worried when at large; and the relief from trouble, the rest, and the good diet of the public asylum enable a fair proportion to "recover." At the private asylum, however, the average inmate has not been so badly off at home. He or she has probably been well fed and not over-worked, physically at least. If it were possible to eliminate from the total number of patients who recover in public asylums those who are under-fed and over-worked, we suspect that barely 5 per cent. of "recoveries" could be fairly ascribed to the treatment they receive. While, if it were possible to exclude from the calculation those patients who "recover" in private asylums because they are relieved from the "worry" of domestic life at home, there would be very little, if any, difference in the compara-

tive proportion of "recoveries" in the two classes of asylums. These are conjectures, but they are based on figures quite as good as those which have been cited in the discussion in progress. The truth is, neither the authorities of public asylums nor the managers of private asylums can boast of their results. The less said about "cures" the better. For such "recoveries" as occur, the relief from worry, the rest, the change of scene, and the better, or different, diet must be credited. Neither in public nor in private asylums, nor in the hospitals, so-called, devoted to the reception of the victims of mental disease, is there much "medical" treatment beyond drenching the turbulent with bromide of potassium, chloral, and other injurious drugs, which unfortunately produce a stupor miscalled "sleep." For the rest, the treatment of mental disease is either experimental or of the nature of *placebo* administration. We do not venture to hope matters will mend in this respect until the existence of mind or brain symptoms in an "illness" is no longer supposed to take it out of the category of ordinary diseases, and to necessitate the case being handed over to the care of a specialist, whose specialty has not, and cannot reasonably and scientifically have, any solid ground or real existence.

Annotations.

"Ne quid nimis."

CORONERS AND UNCERTIFIED CAUSES OF DEATH.

AT a recent meeting of the Sanitary Committee of the Town Council of Hull, the large proportion of uncertified causes of death in that borough came under discussion. The chairman reported that between 1878 and 1884 the causes of 1141 deaths in Hull were uncertified, no medical certificates being furnished to the registrar, and no inquests being held. This number appears to be rather under than over stated, for, according to the Registrar-General's returns, the numbers of uncertified deaths were 203 in 1882, 217 in 1883, and 218 in 1884; and it may be stated that the proportion of uncertified deaths in England has been slowly but steadily declining in recent years. As regards the proportion of uncertified deaths in the twenty-eight largest English towns in 1884, the mean percentage of the total deaths was 2·4; the proportion in London was 1·3; while in the twenty-seven provincial towns it ranged from 0·9 in Portsmouth and 1·0 in Plymouth, to 5·6 in Hull, 6·0 in Halifax, and 6·8 in Oldham. It appears, therefore, that the proportion of uncertified deaths in Hull last year was larger than in any other of those large towns except Halifax and Oldham. The same authority also shows that the proportion of inquest cases in Hull did not exceed 3·6 per cent., while the mean percentage in the twenty-eight towns was 6·3. The further discussion of this matter was postponed, but it was suggested by the coroner that, in any case of an uncertified death, before he decided upon the desirability of holding an inquest, he should be furnished with a certificate from the medical officer of health as to the probable cause of death. The better and the more direct course would be, however, for the coroner to receive this information direct from the registrar, who must be the original source of such information. It is evident that unless the medical officer of health were properly authorised to hold a kind of quasi-inquest in uncertified cases, he would know no more of the "probable cause of death" than the registrar, who has to ascertain this fact for insertion in the death register. The employment, moreover, of the medical officer of health in this capacity would, at any rate in Hull, occupy a very considerable proportion of his time, and necessitate an entire rearrangement of his duties and remuneration.

CHOLERA AND SANITATION.

IT is with feelings of regret that we have read Surgeon-General Gordon's letter on cholera in the *St. James's Gazette* last week. Dr. Gordon is not alone in his belief that cholera is in no way due to any definite infection which can be conveyed from man to man; but we believe he is singular in so using this belief as to cast discredit on sanitary measures, even when adopted under a fear of cholera distribution. He alleges, for example, that institutions enjoy no special exemption, notwithstanding that every attention is paid to sanitary requirements; and going on to speak of the manner in which cholera attacks one locality rather than another, he asks how this can be accounted for according to principles of sanitation. He also compares the influence of "sanitary" measures, disinfection, and the like, to that of "the demon of pestilence" which the Chinese propitiate when an epidemic breaks out. It is, to say the least, strange that such views should emanate from a prominent Indian medical officer within a few weeks of the earnest protests which were made by the Indian delegates, and by one of the British delegates who had a wide Indian experience, at the International Sanitary Conference in Rome, to the effect that Indian experience has abundantly proved that it is to the adoption of efficient sanitary measures that nations and populations must look if they would lessen the mortality from cholera and prevent its spread in the districts over which they have control. And, quite apart from cholera prevention, it is so perfectly obvious that the mortality from many other preventable diseases is greatly lessened by the adoption of sanitary measures that the opportunity chosen for implying that they will be useless in a country like Spain, where public health measures are so urgently wanted, seems particularly ill-timed.

ALDERSHOT CAMP.

HIS ROYAL HIGHNESS PRINCE ALBERT VICTOR, eldest son of the Prince of Wales, having completed his education at the University of Cambridge, has joined his regiment at Aldershot to undergo the military training which is thought a fitting prelude to the occupation of the throne of these realms, which in due course His Royal Highness will be called to—distant, however, as we hope this may be. It is well known that the members of our Royal family have shown a singular susceptibility to two of our most common zymotic diseases. The late Prince Consort died of typhoid, suspected of being contracted while inspecting the buildings of a military college not far from Aldershot, placed on an isolated spot on the porous soil of the Bagshot Sands, similar to that on which the camp at Aldershot stands. There has been for a long time past a growing impression that no soil is more susceptible of insanitary impregnation where insanitary conditions exist than the porous Bagshot Sands, a name given to the extensive tract of moorland and heath extending many miles around the village of Bagshot, which is in its centre. The low-lying portions of this tract of country are very marshy, and those localities midway between hill and dale are apt to be very damp also. Intermediate layers of clay often extend for long distances a few feet below the upper porous sand, converting what on the surface appears to be a dry soil into a damp one. Numerous springs may be seen to ooze wherever these subsoil clays crop up at the surface, and thus is formed one of the peculiar features locally known in the Bagshot Sand district as "middle-hill springs." Should any

subsoil water in its course to these springs be subjected to insanitary impregnation, it would be difficult to conjecture how far mischief might extend. Instances are not wanting of such occurrences, and it is this which makes special precautions necessary wherever there is an increasing population and building extensions on the Bagshot Sand area. The position of the camp at Aldershot, especially that portion of it occupied by the cavalry barracks, is singularly favourable to the development of mischief should any unwholesome conditions be permitted to arise. The cavalry barracks are on a circumscribed portion of the Lower Bagshot Sands, bounded on the one side by the clay-impregnated Middle Bagshot Sands, and on the other by the denser London clay, which crops up to the surface in this district. The regiment of Hussars to which the Prince is commissioned would in all probability occupy these barracks. Some assurance should be forthcoming to allay any anxiety in the public mind as to the sanitary state of the camp. It would be satisfactory to learn the number of cases of diphtheria in the past year in and around the camp, and what precautions have been taken to guard against the extension of this and other zymotic diseases, in the interest of our soldiers and our future king.

ACUTE ENCEPHALITIS OF CHILDREN.

THE diffuse inflammatory affections of the cerebral tissue in children are enveloped in mystery, even if they ever occur. Strümpell has investigated what he calls the acute encephalitis of children. He endeavours to assimilate infantile cerebral paralysis to the well-known spinal paralysis of children. Acute poliencephalitis is the counterpart of acute poliomyelitis. These affections attack the grey matter of the nervous system; on the one hand it is the cerebral cortex, on the other the anterior horns of the spinal cord. In autopsies of children dying with cerebral paralysis it is not uncommon to find cicatricial wasting of the motor areas of the cerebral cortex. These morbid conditions are sometimes congenital, when they are regarded, probably on insufficient grounds, as simple atrophy. Strümpell believes that many of the cases originate in acute inflammation of the grey matter. According to him, clinical experience further proves the analogy between acute poliencephalitis and acute poliomyelitis. Strümpell has observed twenty-four cases of acute poliencephalitis at ages varying between four weeks and six years. Seven cases were under one year of age; eight occurred in the second year, and four in the third year of life. The causes are said to be obscure, but the progress of the cases is characteristic. The onset is rapid, with the general symptoms of fever and vomiting something akin to meningitis. Convulsions are observed on both sides of the body, and consciousness is lost. The initial stage may last only a few days, or may be prolonged for two weeks or even two months. The author believes that death may happen in the first period, though he has no proof of this occurrence in his own experience. There is but little gradation between the febrile period and the second stage, or paralytic period. The general condition of the child rapidly ameliorates, and then the hemiplegia remains as a sort of surprise for the physician. The hemiplegia is more marked in the upper than the lower limb; it rarely attacks the face, but strabismus has been observed several times. Sometimes there is monoplegia only. Anæsthesia is not observed. The palsy does not remain at its worst, and though there is no rapid wasting of muscle, yet the limbs are arrested in growth. As a further contrast to the spinal palsy, the muscles, even if there be no definite contracture, are yet in a state of tension. Strümpell does not omit to mention the occurrence of symptomatic epilepsy, first unilateral then general. He speaks also of the development of athetosis. There can be no misgivings as to the nature of the disease that Strümpell writes about, and even his description of its clinical aspects is not complete. But the chief interest to neurologists is the pathology of this so-called infantile hemiplegia. We think it not unlikely that some cases of this disease may own the same pathogeny as poliomyelitis acuta. *A priori* we can think of no reason why this should not be the case. But the pathogeny of acute poliomyelitis is unsettled, though there can be no question that in some cases the signs of inflammation are too marked to be overlooked. A theory which requires careful consideration, and which ought to be tested whenever possible in the deadhouse, is that of thrombosis of the veins of the cerebral cortex; this view has been put forward by Gowers in his "Diagnosis of Diseases of the Brain."

THE BRIDLINGTON MEDICAL OFFICER OF HEALTH.

PROTEST is necessary as to the treatment to which the medical officer of health for Bridlington has, according to local report, been subjected. It appears that Mr. J. Allison is now advanced in years, and owing to this and some other unexplained circumstances which possibly lead to infirmity, it is considered by some members of the local board that a more active officer is needed. It so happens that Mr. Allison is a cultured student of medicine and science, and it might have been expected that opportunity would have been taken, after private consultation with him, to frame such a resolution as would have enabled him to retire with a feeling of satisfaction that his able services had been appreciated. But quite the opposite method was adopted. One member suggested that a change was advisable; a second moved that a successor be advertised for; and, notwithstanding the protest of a member of the board and of the chairman at a proceeding so indicative of all want of politeness and courtesy, the rude curt motion was passed, and we suppose Mr. Allison will see from the papers that he is no longer wanted. Such action ought to have a deterrent effect upon any desire to succeed an officer like Mr. Allison, whose printed reports, quite apart from his private characteristics, merited very different treatment.

ULCERATIVE PERFORATION OF THE TRACHEA.

AN inquest was held on August 20th, by Dr. Danford Thomas, at the Coffee Tavern, Paradise-street, Marylebone, respecting the death of Helen Mullens, a girl aged twelve years. On the morning of her decease she complained of soreness of the throat, for which her parents consulted Dr. Tait, a local practitioner. This gentleman deposed that on examination he found marked difficulty in breathing, and, diagnosing the case as one of "inflammatory croup," gave a drachm of ipecacuanha wine as an emetic, and ordered fomentations to be applied to the throat. The girl had scarcely left the dispensary when she was seized with distressing dyspnœa, which proved fatal in about a quarter of an hour. At the post-mortem examination of the body it was found that a tubercular abscess had formed in the mediastinal lymphatic glands, and that this had ulcerated into the trachea about half an inch above the orifice of the left bronchus. Through the opening, which admitted the tip of the forefinger, a quantity of cheesy matter had escaped into the trachea, which was almost completely blocked. At the base of one lung was a wedge-shaped patch of consolidation, having all the appearance of an infarct from embolism of a branch of the pulmonary artery. On dissection, however, it was discovered that the initial lesion was plugging of a bronchial tube with caseous débris derived from the before-mentioned tubercular abscess. This had led to collapse of the air vesicles, engorgement of the corresponding vascular area, and finally pneumonic exuda-

tion. There were numerous grey granulations in the larynx and trachea, but no ulceration of the mucous membrane. The other organs of the body were free from tubercular disease. Apart from its pathological features, the case is interesting as showing the value of an autopsy when there is reasonable doubt as to the cause of death. To say the least, it was a significant fact that a child twelve years of age should, within a few minutes of taking a dose of medicine, suddenly and unexpectedly die. Suspicion might have rested on the doctor who dispensed the drug. Mr. Pepper gave it as his opinion that the actual condition could not have been diagnosed with certainty during life, and that under the circumstances the treatment adopted was quite appropriate.

THE RIVER LEA.

CLAPTON and its neighbourhood are disturbed about the condition of the Lea, which, if the statements made concerning it are correct, affords ample reason for condemnation. At a public meeting which was held last week it was described as little better than an open sewer. In 1868 the Lea Conservancy Board was constituted, but, according to Mr. Charles Russell, Q.C., who presided over the meeting, this board had done little else until recently than charge for boat licences. At Tottenham the sewage of 70,000 human beings was discharged, without any treatment, into a dock about sixty feet by twenty feet in dimensions, and this mass found its way into the river. The powers of this board were not easily put into operation. It could give notice if sewage was discharged into it without being properly disinfected; but the notice must be of not less duration than one year, and it might be as many as three years, and might even then be extended on application to the Home Secretary. In July, 1884, such notice was given to the Tottenham Local Board, and the period of notice has now expired; but even if the Tottenham board should provide a precipitation scheme, and only the effluent were discharged into the Lea, it is not obvious that this would be a sufficient remedy, for the Lea cannot be described as a running stream, but is practically stagnant, owing to the action of the locks. Mr. Russell pointed out that the Act of 1868 could not give authority to any person to create a nuisance, and he therefore recommended that pressure should be brought to bear upon the Local Government Board to compel the entire removal from the river of all sewage and effluent, which could be treated on a sewage farm where it would have no opportunity for doing harm. Whatever is the outcome of the present agitation, it is to be hoped that the usual lengthy legal proceedings will be curtailed, and that an early remedy will be found for a condition which has been too long tolerated.

LYMPHODERMIA PERNICIOSA.

UNDER this title Professor Kaposi of Vienna has lately described in detail a case of what he believes to be a hitherto undescribed form of skin disease. A widow, aged thirty-nine, had suffered for more than a year from an eruption, which passed at first for a universal chronic eczema. On admission to hospital the face and hands were chiefly affected, but the skin of the scalp, forehead, face, ears, and neck was of a diffuse brownish-red colour, thickened, desquamating, and with honey-like crusts here and there. In the clavicular regions, upper part of chest, and axillæ, the submammary folds were reddened more or less, and desquamating or oozing. On the abdomen and back were similar patches. The extensor aspect of the upper limbs was the seat of a certain degree of desquamation, and the skin of the wrists and hands was thickened, scaly, cracked, and oozing in places, whilst the inferior extremities were less affected. The inguinal and cervical glands were swollen to the size of nuts, and firm. No visceral disease was detected, and the temperature was normal, but violent itching accompanied the eruption. On the left thenar eminence and the flexor aspect of the forearms were to be felt in the subcutaneous tissue several firm nodules, in size from a pea to a pigeon's egg, fairly well circumscribed. From her admission till six months later, when the woman suddenly died after an acute paralysis of the left inferior extremity the day before, the nodosities steadily increased in number in the deep cutaneous and the subcutaneous tissue of the flexor aspect of the forearms, breasts, epigastrium, abdomen, face, &c. They softened and ulcerated through and became covered with crusts. The face became enormously swollen and leontiasic, and the ears stood out from the head. The spleen soon became enlarged, and a serous infiltration of the skin set in with ascites. The lymphatic glands became involved, and a progressive diminution of red blood-corpuscles was traced. At the necropsy the spleen was four times its normal size, the liver voluminous; some small nodosities were found in the lungs and beneath the pleura, and the medulla of the bones seems to have been affected. The skin and lung tumours were all of the same character, and the former apparently originated near fat lobules. They were composed of a delicate fibrillar stroma, deprived of vessels, with connective-tissue corpuscles poor in protoplasm in places where cells, resembling lymph cells, and lymphoid nuclei occurred aggregated in extremely dense masses free in the intercellular spaces. Professor Kaposi refers shortly to cases described as *lymphadenie cutanée* by French authors, which have been described, if we remember rightly, as preceded by eczema, but he refuses to acknowledge the identity of the affections.

THE EDUCATION OF THE BLIND.

SOME interesting information with regard to the condition and requirements of the blind, with suggestions for the improvement of their state, are to be found in a paper recently published by Mr. William J. Day. A blind man himself, and a visitor throughout Worcestershire among others similarly afflicted, Mr. Day's observations have all the force of experimental testimony. It is satisfactory to find that the determination to make up for lost sight by the fuller use of faculties still remaining expresses itself in his paper by practical suggestions as to the care and training of the blind. In our attention to the prevention and cure of diseases of the eye, we are apt to forget that much may be done without the aid of this organ, and that consequently we owe a duty of instruction to those who have lost the power of using it. Two important points should be remembered by those who have to do with this class of sufferers. In the first place, blind people, notwithstanding the retiring habit which their misfortune imposes on them, are to be drawn out if possible. The society of the seeing is good for them. In the company of those who see they cannot but learn much about the world around them. All that conversation can do to cheer, direct, or teach them is thus made available. The more systematic education of the blind, young and old, is a subject of even greater consequence, since it includes that just alluded to, and allows the blind man what he feels justified in claiming—a place in the competition of life. It is suggested, with a very fair degree of reason, that the elementary school should form the common training-ground of all children, whether they see or not. To teach with raised letters in one or two cases does not require any great expenditure of time or effort on the part of a teacher, though the bulk of his class of children follow a different plan. The alphabet used is not difficult to follow, and, once well learned by touch, will serve the master of a class as a means

of instruction no less easy than that which is expressed in printing ink. The Roman alphabet is that which finds most favour with the author we have quoted. It is, according to him, to be preferred as a common medium of communication because of the boldness of its type, and from the fact that it continues sufficiently to stimulate the sense of touch even when the hand has been somewhat hardened by the work of after-life. It is a regrettable fact that but few occupations have so far afforded to blind men the means of livelihood. Music and basket-making constitute their chief spheres of labour. Possessing, as they do, touch of unusual delicacy, one would expect that such trades as clothes-making and shoemaking might also occupy their energies. In any case, their education is a primary duty. This gained, and the habit of free locomotion formed, their further progress in usefulness, though gradual, is likely to be real.

PEPTONISATION.

THE investigations of Thénard, Paul Bert, Regnard, Béchamp, and others have shown that fibrin and organic tissues can break up peroxide of hydrogen without themselves undergoing change. Some organic elements do not possess the property of disengaging the oxygen from the "oxygenated water." Weltzien has demonstrated that iron and aluminium, which do not decompose the peroxide of hydrogen, are yet transformed into hydrate. Chandelon suggests that certain organic substances may undergo an alteration of the same order. He has submitted an albuminous solution to the action of the oxygenated water, generated by passing a current of carbonic acid through water containing the peroxide of barium. The albumen thus treated did not break up into leucin and tyrosin, which are the first products of its decomposition, but it was transformed in part into peptone. Chandelon repeated the same experiment, adding hydrocyanic acid to the solution of albumen in order to prevent putrid fermentation; he then passed the current of carbonic acid for twenty-four hours. After the removal of the carbonate of barium, hydrated peroxide of barium, and an insoluble organic flocculent substance, he detected the presence of dyspeptone. Besides this the liquid in question contained (1) an albuminate having the characters of caseine; (2) a material which had the properties of the apeptone of Meissner, albuminose of Kühne, and propeptone of Schmidt-Mulheim; and (3) a body giving all the reactions of peptone. The three substances are separated by the following processes:—The liquid is filtered, and then a slight excess of dilute sulphuric acid is added, which precipitates not only the excess of baryta but also proteine. Next, neutralisation is effected by means of hydrate of barium. This mixture is again filtered, and the resulting liquid is concentrated, and a solution of salt is added in order to precipitate the unchanged albumen, and then the liquid is boiled. The resulting liquid is filtered and again treated with powdered salt to saturation. A precipitate of propeptone is formed which appears in flakes at the temperature of the sand-bath. This propeptone is collected on a filter and washed with a solution of salt. The liquid is again boiled in order to eliminate all the propeptone. It is concentrated to just upon the point of crystallisation of the salt, and then submitted to dialysis until the liquid that passes no longer precipitates with nitrate of silver. Hydrocyanic acid ought to be added during this process, to prevent putrefaction. The dialysed liquid is precipitated with three times its volume of alcohol at 90°, and a white precipitate of peptone is obtained. Chandelon remarks that the relative proportion of these substances may vary, and in certain cases the quantity of proteine obtained is much greater than the quantity of peptone. These experiments prove that peptonisation is a phenomenon of hydration. The hypothesis is advanced that the digestive ferments act by giving birth to peroxide of hydrogen. This supposition, however, must be regarded as a very doubtful representation of what takes place during the different digestive acts.

LONDON MORTUARIES.

AN inquest was held last week at the Mile-end Old Town Workhouse, which shows very plainly the difficulties which arise owing to the absence of a proper mortuary in a London district. A man had died from natural causes, but it was nevertheless considered necessary that an inquest should be held, and for the purpose of a post-mortem examination the coroner's officer applied to the relieving officer to remove the body to the workhouse mortuary, the hamlet of Mile-end Old Town being without other accommodation. The relieving officer feeling unable to do so, the matter was reported to the coroner and to Dr. Matthew Corner, the medical officer of health, who certified to the need for the removal of the body. The master of the workhouse thereupon consented to admit the body, and the coroner's officer instructed an undertaker to effect the removal, the undertaker having a contract with the guardians for such purposes. But the latter, on further consideration, determined to take no action without an order from the relieving officer, and thus no inquest could be held, and the body remained where it was in an occupied house, in a state of advanced decomposition. The undertaker pleaded that he had communicated with Dr. Corner, who promised to see to the matter, but nothing further was done, and as a result Dr. Corner was censured by the jury for neglect of duty. We should gather from the newspaper report that Dr. Corner had omitted to follow up the matter, and that the delay was in part due to this circumstance. But the fact remains that it was impossible for Dr. Corner to exercise the same control over the removal of the body as he could have done had the sanitary authority possessed a mortuary of their own, instead of relying upon the miserable and uncertain substitute of that which is intended only for those who die in the workhouse. A serious responsibility rests upon this authority for leaving their district so ill-provided.

THE BIRMINGHAM WORKHOUSE INFIRMARY.

A PROPOSITION to expend the sum of £60,000 in erecting a new infirmary for the Birmingham Workhouse is exciting a considerable amount of local feeling. After several divisions and amendments, the project has been sanctioned by twenty-four votes to twelve, a considerable number of the guardians abstaining from voting, and a prompt intimation being given, that at the next meeting it will be proposed to rescind the resolution. On the financial question, in its local bearings, we have no disposition to comment; but on the medical aspect of the question, in the present position of the parish of Birmingham, there is much to be said. Officers, servants, and paupers included, the Birmingham Workhouse now shelters about 2500 persons. Many of these would doubtless be transferred to the new infirmary; but an expenditure of £60,000 implies a vast and well-appointed building, to which, not improbably, the sick poor will flock in increased numbers, in proportion to the improved accommodation. Is one master to govern the vast concern? Is the medical staff to remain as it is, or to be raised in number, remuneration, and status in proportion to the increased duties? It is matter of common knowledge that the administration of out-door medical relief in Birmingham has been for some time in an unsettled, and not quite satisfactory, state. A new scheme is about to be tried, but so avowedly is it tentative,

that under it officers are only to be appointed at first for one year. The separation between in-door and out-door medical relief is only nominal; in principle the system is one. While the new out-door scheme is being tested, it would seem reasonable to make temporary improvements for the wants of the sick in the house, and defer a large expenditure, which must be practically permanent, until the whole question of parish medical relief for the town has been carefully inquired into. The Birmingham guardians who have applied themselves to the subject have doubtless done so with much assiduity and good intention; but it is not stated whether any leaders of the medical profession in the town, or elsewhere, have been consulted. Further inquiry would doubtless entail a little delay; but this need not be considerable if the disputants apply themselves with one mind to the solution of a problem which, great though be the value of £60,000, involves issues still greater. The guardians of the poor are custodians of the public health. The life and comfort of many thousand poor persons, and the health of the whole population of Birmingham, in this and succeeding generations, are matters of national concern. If the project now in debate were definitely sanctioned, and put into execution at once, two years at least must elapse before the work could be completed. In a couple of months much might be done towards reconsidering the whole question; and if exhaustive and impartial inquiry did not result in fully convincing the dissentient minority and reconciling all differences, it could not fail to elicit information of great interest and practical value.

THE BACILLUS OF SYPHILIS.

MM. ALVARÈS and FAVEL have been making investigations at M. Cornil's laboratory into the alleged syphilis bacillus discovered by Lustgarten, with the result that much doubt is thrown upon the specific nature of this organism (*Prog. Méd.*, August 22nd). They aver that there exists in certain normal secretions a bacillus not hitherto described, identical in its shape and staining reactions with that described by Lustgarten as special to syphilis. It is possible that the bacillus found by that observer in sections of syphilitic lesions and in syphilitic secretions is merely this common bacillus. The microbe strongly resembles the bacillus of tuberculosis, and yields many of the staining reactions hitherto considered as special to Koch's bacillus and to that of leprosy. It is distinguished from the bacillus tuberculosis, apart from its slighter thickness and its less granular appearance—conditions difficult to appreciate at a single examination,—by its less resistance to alcohol after staining with fuchsine and treatment by nitric acid, and also by its not being stained by Ehrlich's method with methyl-violet. The clinical diagnosis of tuberculosis by means of the histological examination of secretions should be made in view of these facts.

THE FACTORY ACTS EXTENSION BILL.

THERE appears to be some reason to hope that at last the Legislature is about to exert its powers on behalf of the long-neglected class of shop assistants. Such action has been condemned by some as partaking too much of the nature of paternal influence. We are no great admirers of such influence in the field of politics, but we cannot in fairness admit that such social problems as that presented by the subject before us lie outside the limits of that field. Other measures of relief have been proposed and tried without success, and the principle of legal restriction has been proved to work well in the not dissimilar case of factories. We confess to some degree of disappointment that shopkeepers have shown themselves as a body unable to appreciate the necessity for, and the benefit to be derived from, such a regulation of their custom as the new Bill contemplates. Some faculty of organisation may fairly be looked for in business men. As such, one might expect of them sufficient contrivance to prevent their being driven to keep open shop at almost any hour of the morning or evening by the carelessness of unmethodical customers. However, between disunion and the dread of risking too much or even anything, the long hours and other evils continue unabated. To some extent, no doubt, early closing has been adopted, but the movement is languishing and was never general. In the public interest something remedial must be done, and it is clear that the only authority sufficient for the purpose is that of the Government. While matters remain as they are, a large number of young men and women are losing health, and the greater part of all other satisfaction that belongs to life, in the wearing drudgery of this service. Their money compensation, which could never equal such a sacrifice, is a mere trifle in comparison. After several previous articles on this subject, it would be superfluous to reiterate the medical reasons which justify the extension of legal powers for which we ask. No medical man need go out of his practice to find proof of the injury which long serving on the feet in heated, close, and dusty shops and work-rooms is doing. Sir John Lubbock, we observe, does not intend that his Bill should provide for inspection of workshops. If it can be carried into effect without some provision of the kind, by all means grant employers this exemption. For our own part, we cannot see how a mere power of complaint on the part of employés is to guarantee the conscientious execution of this much-needed measure.

STREET LAVATORIES.

MR. MARK H. JUDGE, who was recently presented with a testimonial for his excellent work on the Paddington Vestry, has designed a street lavatory which deserves the attention of all local authorities in large towns. The chief feature of Mr. Judge's plan is that the accommodation is entirely below the surface of the roadway. All that can be seen is an ornamental pillar-lamp rising out of a bed of plants and surrounded by an ornamental iron railing. On one side are two flights of steps, one for entrance and one for exit; below are five waterclosets, nineteen urinals, a lavatory for three wash-basins, and an attendant's room. Each closet is separately ventilated by a grating in the curb, the whole being ventilated through the lamp, and lighted by means of prism pavement lights. The lavatory is most ingeniously designed, and is, moreover comparatively inexpensive. The introduction of such places into London streets would be a great boon to the inhabitants of the metropolis.

"EXTRAORDINARY (?) CASE OF HYDROPHOBIA."

THE report of a "singular" case of madness in a dog has gone the round of the daily papers. Briefly stated, it may be said that an insane individual cut his throat, and an Italian greyhound licked up some of the blood from the wound. Two days later the dog was found to be "ill, foamed at the mouth, and was to all appearances going mad." Still two days later the animal was destroyed because it was so infuriated, and had all the symptoms of hydrophobia. "It is thought that it was infected by the blood of the man who had committed suicide." There are several ways of interpreting the circumstances of the case. It seems certain that the man was not insane as the result of hydrophobia, and it appears to be equally certain that the dog was rabid at the time of his death. If these propositions be granted, then it is perfectly clear that the dog could not have become rabid as the result of infection from the man, for the incubation period would have been less than forty-eight hours;

and although accurate information on the period of incubation of rabies in dogs is still wanting, yet Lafosse and others agree in stating that seven days is the shortest time. If the dog were mad, but not from rabies, then it is possible that its madness may have been part of a general infective disease due to the ingestion of some infective agent from the man's blood; but this is hardly probable. That insanity could be directly conveyed from the man to the animal must be looked upon as a popular fiction, which implies that madness resides in the blood, and may be communicated to others through the agency of this fluid. It is most probable that the dog had been inoculated with the poison of rabies some time before it lapped its master's blood.

THE MADRAS MEDICAL COLLEGE.

THE jubilee celebration and annual distribution of prizes, medals, and qualification certificates to the students of Madras Medical College took place on the 1st ult., when Surgeon-General M. C. Furnell, M.D., occupied the chair. From the report, which was read by the Principal, Brigade-Surgeon J. Keen, M.D., it appears that the session opened with 120 male and four female students in the Senior or University Department, seventy-six male and seven female students in the Second or Apothecaries' Department, and seven male students and one female student in the Chemists and Druggists' class. Eighty-two of these were Europeans or Eurasians, forty native Christians, eight Mahomedans, thirty-three Brahmins, forty-nine Sudras, and three Parsees. Of these, three have been removed by death, six resigned, and four have proceeded to Europe to continue their studies, leaving 202 on the rolls. During the session the degree of M.D. of the Madras University was obtained by two students. Two students passed the Final M.B. Examination, and three the First M.B. At the Preliminary Scientific Examination three passed. Seven students passed the Final L.M.S. Examination, and twenty-nine the First L.M.S. The total expenditure of the College for the official year 1884–85 amounted to Rs. 67,359 5-11, and the receipts from fees, &c., during the same period to Rs. 14,905, showing an increase of Rs. 1408 over last year's receipts. From the time of the introduction of the system of fees for tuition up to the present year Rs. 74,683 have been credited to Government. At the conclusion of the report Dr. Furnell, who was Principal of the College when its walls were first thrown open to ladies, distributed the prizes and delivered an address in which he dwelt chiefly upon the spread of epidemics and the importance of cleanliness and a pure water-supply. An address was also delivered by Dr. J. L. L. Ratton.

INSANITARY DWELLINGS.

MR. SKEGG, medical officer of health to the district of St. Martin-in-the-Fields, last Saturday applied to Mr. Flowers, at Bow-street Police-court, to order the closing of a building which had been recently constructed, and which consisted of fifty-four rooms inhabited by as many as 145 persons. It was stated that the rooms were very small, and were kept in a filthy condition; the rooms in the basement were dark and unfit for habitation; for three or four days a week no water could be obtained for cleansing the premises, and there was hardly any for drinking purposes. It was of no use to speak to the landlord, and notice had been served, but no steps had been taken in the matter. Again, a letter signed "Sanitary" appeared in *The Times*, describing the condition of a house in a crowded part of Marylebone. As many as ten families, representing fifty persons, dwelt in this house, for which there is but one watercloset, and this has been without water-supply for at least nine years. The place was described as sickening and filthy in the extreme, the yard attached to these premises in wet weather being flooded with a mixture of water and sewage. The owner of this rookery, we are told, is a member of the Metropolitan Board of Works. Such is the condition of the premises referred to in last week's newspapers, and there is no doubt they are not exceptional. In the first case the sanitary authority has done its duty; in the second there has been obvious neglect. The need for a larger staff of inspectors is known to everyone who has had experience of the sanitary wants of the metropolis, but the authorities themselves are slow to adopt a course which adds, even in a small degree, to taxation, and which interferes with the personal interests of many of their members. It is no matter for surprise that the present system of London government is almost universally condemned.

EPILEPSY FROM AURAL DISEASE.

THERE might be good excuse for regarding Ménière's disease as a form of epilepsy. On reading the title of M. Boucheron's note to the Académie des Sciences, the idea of a philosophical consideration of aural vertigo presented itself to us. But M. Boucheron does not refer to this disease. In truth, there appears to us to be but little evidence in support of his doctrines. He wishes to teach that "auricular epilepsy" may occur in young children during the evolution of some aural mischief that determines deafness and dumbness; that it may also set in during the "seconde enfance" as the result of disease of the ear, with slight or marked deafness; and, lastly, that it may be met with in the adult. It may also be observed in dogs, cats, and some other domestic animals, in which it appears to be due to the presence of some foreign body, such as a plug of wax enclosing an acarus. This form of epilepsy is said to be characterised by epileptiform convulsions, presenting as much variety as "pure" epilepsy, as well as by the presence of an affection of the ear—catarrh of the tympanum, otorrhœa, wax, labyrinthine disease, &c. We are not prepared to state that epilepsy may not be determined by lesions of the internal ear, but surely such cases can hardly be frequent, and they have certainly not been made much of by the majority of writers on the subject. The most that can be said in favour of this view is that it would require a powerful predisposing element.

FRENCH MEDICAL SCHOOLS.

IT is not unusual to hear people speak of the University of Paris. This is, however, incorrect, there being only a University of France, with which all the institutions for higher education, both in Paris and the provinces, are connected. The complete medical schools having all the examinations for the Doctorate are called Faculties. Up to 1870 there were only three of these—Paris, Strasburg, and Montpellier. After that time the Strasburg Faculty was transferred to Nancy, and three additional faculties have subsequently been established at Lyons, Bordeaux, and Lille. There are also complete medical schools where only some of the examinations can be gone through, and which, therefore, are not entitled to rank as faculties, but are styled schools "de plein exercise," at Marseilles and Nantes. In addition to these there are fifteen preparatory medical schools—Algiers, Amiens, Angers, Besançon, Caen, Clermont, Dijon, Grenoble, Limoges, Poitiers, Rheims, Rennes, Rouen, Toulouse, and Tours,—where medical studies can be carried on for three out of the four years required for the Doctorate. The total number of medical students is 6000, of whom some 4500 are congregated in Paris. It is impossible to suppose that such a number can find a satisfactory clinical training in the Paris hospitals, and in some ways it would be better

if they were distributed somewhat more evenly over the different faculties than they are. The preparatory schools, too, would seem more suited for giving clinical instruction than for the study of chemistry and physiology. Formerly these were frequented to a greater extent than at present by students who aspired only to the title of "officier de santé," but the public is beginning to expect its medical advisers generally to have a complete medical education, and are not satisfied with those holding the lower diploma, the number of candidates for which is therefore diminishing. Altogether the problem of the redistribution of medical students is not a very simple one, but its importance is fully recognised by those in responsible positions.

THE POOR-LAW DISPENSARY SYSTEM IN IRELAND.

THE Irish Poor-law system is not one to be imitated, if we may judge from a paper read lately before the Irish Medical Association on the Abuses of the Red Ticket System of Medical Relief and Suggested Improvements, by Mr. P. J. Bodkin. We have often heard of the abuses of the system; but Mr. Bodkin's facts extend the illustration very much, and may well make us thankful if we are not at the beck and call of anybody who may happen to hold a red ticket. The most unfit persons become possessed of this *talisman*, which dominates the life of the Irish dispensary doctor by day and his dreams by night. A man with a considerable sum in the bank got a red ticket for his wife, and compelled Mr. Bodkin's attendance. In a similar way, his attendance was required by a person who combined in his income the emoluments of poor-rate collector, postmaster, and farmer. It is not unusual for a guardian to send a ticket signed by himself for attendance on his own child. This is not the only convenience of being a guardian. In one district it was notorious that a guardian seldom issued a ticket without receiving some adequate recognition of his services, such as a fowl, a day's work, or a cart of turf. A guardian has also a fine means of revenge in holding red tickets. He can, as in a case mentioned by Mr. Bodkin, distribute them bountifully, at unreasonable hours, and in entirely unnecessary cases, till the doctor's life becomes intolerable. Next to the doctor, under such a system, the person to suffer is the one who is really ill and really poor. When the medical officer is so ill-used, it is marvellous that complaints against him are so infrequent. Then the honest ratepayer is injured by such a system. How is Ireland ever to be better under such a pauperising Act? And yet we blush to say that English statesmen have been lately imitating some of its worst features by making medical pauperism no disqualification for political privileges. Let us pull up on this line of road. Let us pity the real pauper and help him—not flatter him or make him proud of his position, but rather lead him to exert himself to achieve his own independence, both politically and personally.

TYPHOID IN ABERDEEN SQUARES.

MR. MEARNS, of the Aberdeen Town Council, seems a little too sensitive in respect of his own dignity, and a little too insensible of the respect due to a medical officer of health. Dr. Simpson, in the latter capacity, has encountered much difficulty in getting squares paved and cleansed. Over three years have elapsed since he began to press this obvious necessity—made obvious to the most obscure mind by the fact that in this year alone there have been no less than thirty-three cases of typhoid in the squares, not due to polluted water or milk, but to accumulated filth; and because he has ventured in his report to remark on the sickening delay in this matter, Mr. Mearns's dignity is offended, and he resents being rebuked by one whom he is pleased to call over and over again "a paid servant." Be it so. But is Dr. Simpson the paid servant of Mr. Mearns or of the city of Aberdeen, with its 105,000 inhabitants? And for what is he paid? To say pleasant things to Mr. Mearns, to call filth by another name, and make light of thirty-three cases of typhoid? Really, the boasted local government of this country will come to grief and shame if such "servants" as Dr. Simpson meet with many such masters as Mr. Mearns. But, to do the Council justice, Dr. Simpson found many members to appreciate and to justify his plain speaking on a very serious business.

GOOD NEWS FOR PREGNANT WOMEN.

MR. JOHN BLAND has been letting his mind dwell on the case of women who have the misfortune to have to bear children in cold or temperate climates, as compared with their luckier sisters who have to discharge the same duty in the South of Europe or in Africa. He assumes that much of the difference is due to the mere difference of climate the warm climate relaxing the tissues, and *vice versâ*. Upon this basis he has constructed a box with a heating apparatus, in which he proposes to place the lower part of the woman in labour. The heat of this box, he thinks, will bring the woman, at least in the lower part of the body, to the advantageous position of her more southern sisters. Again, it appears that a lady at the last Exhibition in Paris, in the seventh or eight month of pregnancy, went up in a captive balloon, and before they could descend accomplished the whole of labour, including the expulsion of the placenta. He attributes this not to the fright of the lady, but to the diminution of atmospheric pressure. He has therefore included in his invention a provision for exhausting the box of air on the approach of a pain. The process of labour is to be watched through a window. Mr. Bland frankly tells us he is not a medical man. We might have guessed as much; otherwise he would not have troubled himself to spin such fine theories on a process which Providence has not made pleasant in any country, and which is not likely, we fear, to be much influenced one way or the other by his box. A much more effective way to test Mr. Bland's benevolent views would be to hire a Turkish bath, and use it for first labours for a few months, or to engage a few captive balloons and place them at the service of the maternity hospitals!

CHARGE AGAINST A HOSPITAL DOCTOR.

AN adjourned inquest was held, on Aug. 18th, at the Queen's Hotel, Conway-street, Birkenhead, touching the death of Ellen Craven, aged forty-seven. The deceased, who was in impaired health, died from the effects of suicidal immersion in the Alfred Dock. After being rescued she was taken to the Borough Hospital, where she was attended by Dr. Hyrons, the junior house-surgeon. The police-constable who had charge of the case deposed that deceased did not receive professional attention until twenty minutes had elapsed from the time she was admitted to the hospital, although she was in a state of unconsciousness; and, further, that Dr. Hyrons said, "There is nothing the matter with her, but merely wet; you had no business bringing her here." These statements were contradicted both by Dr. Hyrons and one of the porters employed at the hospital. According to Dr. Hyrons, he saw the woman ten minutes after being summoned to the case, and in the meantime he had made provision for her reception in a proper ward. The coroner, in summing up to the jury, remarked that the balance of evidence was greatly in favour of Dr. Hyrons, who was generally and greatly respected by the poor inmates of the institution; and he trusted the jury would not express or

imply in their verdict that the doctor had been guilty of negligence or inhumanity, as such a finding would cast an unjust reflection on the professional character of a worthy public officer. We are glad to state that this advice was followed; the jury, after a short consultation, found that "deceased died from *natural causes*, but death was accelerated by immersion." The coroner said that the case was decidedly one of suicide, as the woman had deliberately thrown herself into the dock with the intention of destroying herself. We entirely concur in this ruling. A man who kills another, even though the latter is moribund at the time, is in a legal sense none the less guilty of murder.

DISCOVERY OF CHLOROFORM ANÆSTHESIA.

THE *Madras Mail* in its impression of Tuesday, July 28th, has a leader and some correspondence on the discovery of the anæsthetic properties of chloroform. The question is one which is constantly cropping up, and, as we think, needlessly, because the facts are perfectly well known. There is no doubt whatever as to the mode in which chloroform came into medical use. Chloroform, passing from the hands of four chemists, Guthrie, Soubeiran, Liebig, and Dumas, was for a time a chemical curiosity. Into its physiological properties Flourens made inquiry, and practically pronounced it useless for any important medical purpose; but it nevertheless got into some use in combination with alcohol under the name of chloric ether. In the summer of 1847 Mr. Michael Cudmore Furnell, a student at St. Bartholomew's, suggested that this mixture, which doubtless he took to be an ether, should be used as a substitute for sulphuric ether, then in common employment as a general anæsthetic. The suggestion was acted upon by Messrs. Lawrence and Holmes Coote, and chloric ether was no doubt administered as an anæsthetic to patients operated upon by them. The news of this fact was soon afterwards conveyed by Mr. Waldie of Liverpool to Dr. James Simpson of Edinburgh, with the further important truth, supplied by Waldie to Simpson, that chloric ether was a mixture of chloroform with alcohol, and that chloroform deserved to be studied as the probable active agent. Simpson took the hint, tested chloroform as an anæsthetic, proved its qualities, made it known, and gained those rewards for his shrewd intelligence and bold application with which we are all conversant. If a volume were written on this subject, no more and no less could be said upon it; but those who wish to possess further details will do well to turn to Snow's last and great work on "Chloroform and other Anæsthetics," a work as candid and honest as it is clear and philosophical.

"DOING EVIL THAT GOOD MAY COME."

FEW more conspicuous illustrations of this very questionable policy could be cited than the recent publication of vile details in connexion with a subject which cannot be discussed in public without more evil than good resulting therefrom. There is the greater need to make this observation, because nothing in the *réchauffé* of filth with which the prurient taste of the public has been regaled has the least claim to novelty. Mr. Edlin the assistant judge, has not spoken out too plainly or in too strong terms as to the probable and already apparent effects of this most gross violation of public decency. If by way of emptying some pestilent cesspool a pseudo-sanitarian had pumped the foul material over the household, he would not have been acting more wantonly than the promulgators of the detestable trash which, being mistaken for a revelation, has been permitted to poison the minds of all classes with inevitable consequences, the full enormity of which we have yet to realise. In one short month more has been done to lower the moral tone of this country, and of the people of London in particular, than the life-work of a generation can compensate. There is no excuse for the apathy with which the authorities responsible for the protection of the public morals have permitted the floodgates to be thrown down and the metropolis and the country inundated with the outpourings of corruption. The protests which have already appeared are the first results of a reaction; but it is beyond hope, because it is beyond possibility, that the evil can be undone.

CHROMIDROSIS.

A CASE of chromidrosis was reported by M. Féréol to the Académie de Médecine on August 18th. (*La France Médicale*, August 20th.) In the course of last winter M. Féréol first saw the case, which was that of a young woman aged twenty. At that time she was suffering from severe attacks of hysteria; her condition was alarming, and she was much wasted. When examined two months ago, it was noticed that the lower eyelids were of a bluish tint, which became more and more intense as the patient continued to speak. The handkerchief, when vigorously rubbed across the lower eyelid, became stained of the same colour whilst the eyelid became clean and of its natural colour. At the end of twenty minutes the bluish tint had begun to reappear, but there was no perspiration, and no minute granules could be seen even with a lens; the tint had a uniform appearance. The colouration had been noticed in February last, after recovery from the hysterical convulsions. The same purple staining was observed over the sternum between the mammæ, as well as in the axillæ, but these localisations had disappeared by the month of March. Fraud is said to have been out of the question.

THE ABERDEEN INFIRMARY.

REFERRING to Dr. Angus Fraser's criticisms on the administration of the Royal Infirmary, Aberdeen, a member of the Northern Co-operative Company, at the recent annual meeting, proposed to withhold the £50 which the company is in the habit of contributing. The proposal only met with four supporters, and the ordinary grant was carried by an overwhelming majority. This is quite right. The Committee of Management have got what they seem to have needed—a dose of wholesome and sharp criticism from Dr. Angus Fraser. But it is one thing to criticise a hospital committee, and another to withhold well-earned subscriptions. We do not say that there may not be a justification of this measure in some cases; but it is an extreme measure, and is not yet justified. The more generous portion of the company did right.

HYDRONEPHROSIS OR OMENTAL CYST.

AT a recent session of the Society of Russian Surgeons a female patient was shown who had been admitted into Professor Pelyohin's clinic with a huge tumour on the right side of the abdomen. The greatest circumference of the abdomen was ninety-five centimetres. The patient noticed the tumour seventeen years ago, it being the size of a fist. Afterwards it gradually became larger. Examination showed the existence of a tumour in the neighbourhood of the right kidney, which on percussion gave a dull note, this dulness being continuous with that of the liver. Nevertheless, it was evident that the tumour was independent of the liver. It was slightly movable. The diagnosis lay between hydronephrosis and an ovarian tumour. The apparent connexion with the uterus favoured the latter view. The operation was performed on March 12th. When the peritoneal cavity was opened a cystiform tumour appeared, invested with a membranous formation, the vessels of which ran parallel

to one another. No connexion was found between the tumour and the uterus. Having divided the investing membrane, the tumour itself was opened, and it presented an immense cavity into which the hand when inserted penetrated as far as the diaphragm. In the upper part of the tumour a contraction existed, through which, however, the hand passed easily. No remnants of renal tissue could anywhere be discovered. Part of the tumour was excised, the remainder of the wall sewn to the peritoneal wound, and the cavity plugged with iodoform gauze, which was subsequently replaced by corrosive sublimate dressing, as the patient began to show symptoms of iodism. On examination, the liquid from the tumour, the quantity of which was 1000 grammes, was found to contain urea in almost the same proportion as that in which it exists in urine. Subsequently no urea was found in the secretion of the remaining portion of the tumour. Professor Pelyohin, in his remarks on this case, said he was inclined to think that the tumour was not a hydronephrosis, but an omental cyst. In favour of this view were—(1) the number and disposition of the vessels; though most of those in the membranous investment were parallel to one another, some of them presented another arrangement, being interlaced with the parallel ones; (2) the laminar character of the structure; (3) the possibility of penetrating up to the diaphragm; (4) the constriction in the cavity, which might be the foramen of Winslow; and (5) the presence of depressions in the posterior wall of the cavity, this feature being peculiar to the peritoneum, which forms various protrusions.

COCAINE USED IN THE EXTRACTION OF A BULLET.

AT Swansea a bullet has been removed from a would-be suicide, cocaine being used to deaden sensation. The bullet traversed the chest almost in a direct line and became embedded in the thick muscles of the back by the side of the spine, sufficiently superficial to be felt; therefore the amount of dissection necessary for its removal was very little, certainly not half an inch in depth. The cocaine was successful in removing all sensation from the part to which it was applied; but Mr. Joseph Davies, under whose care the patient lies, states that it exhibited no other property than, as is within the knowledge and experience of most surgeons, has already been demonstrated with regard to its power when employed for small operations on the eye, &c., and in the removal of small tumours.

PORTUGUESE TRANSLATION OF A WORK ON CHOLERA.

THE article on Cholera in Gloner's *Nouveau Dictionnaire de Thérapeutique* (Paris, 1874) has just been translated into Portuguese and issued as a closely printed little volume by G. M. da Silva Ionos, surgeon to the San José Hospital, Lisbon. The same writer has also written, in Portuguese, a dissertation on Muscular Contraction and its relation to the Innervation of the Heart and its Vessels, a *résumé* of which he has published in French.

DISSEMINATED SCLEROSIS IN CHILDREN.

ACCORDING to P. Marie, disseminated sclerosis is by no means unknown in the first years of life, and he even asserts that it is frequent between the ages of three and four years. (*Revue de Médecine*, p. 536, 1883.) The "hereditary" form of ataxy described by Friedreich is regarded as its nearest clinical ally. Moncorvo observed three cases of multiple sclerosis out of a total of 700 children in his practice, extending over one year. Marie collected fourteen cases. Moncorvo points out the frequency of epileptiform or apoplectiform convulsions at the onset of the malady; the disorders of motion and the cephalic symptoms, such as ocular paralysis, defects of speech and intellect, were present, according to him, in fifteen out of seventeen cases on record. In all three instances which Moncorvo observed, the signs of hereditary syphilis were either observed or matters of history. He thinks that syphilis may be operative in the production of cerebro-spinal sclerosis. Two of his cases were benefited by treatment with mercurials and iodide.

"DUE TO THE MEDICAL PROFESSION."

WE have to thank Mr. Alderman Cowan, in hearing a charge against Caulbert, the other day at Guildhall, of abducting a little girl, for insisting that there should be an inquiry whether the accused, who was described as "the keeper of a doctor's shop," was a qualified medical man or not. The worthy Alderman said it was "due to the profession." The Alderman spoke well. When all that the profession has done in these late shameless days is known, it will be found that there are men in it who know how to use an honourable profession, and how to deny its sanction to disgraceful and degrading proceedings. We know nothing of the individual against whom the charge was brought, but we repeat we are grateful to Alderman Cowan for remembering, in a demoralising time, and when all the restraints of law and decency seem withdrawn, what is "due to the medical profession."

PUERPERAL FEVER AT GAMLINGAY.

THE Caxton and Arlington Rural Sanitary Authority have issued a public notice stating that since several cases of puerperal fever have occurred at Gamlingay, no person who has been in attendance upon any such case should be allowed to visit or attend upon any case of confinement under any pretext whatever. They further suggest the use of disinfectants on such occasions, and they inform the inhabitants where they can be procured. The action of the authority—doubtless based on the advice of their medical officer of health—is well-timed, and it may usefully form a precedent to be followed in other similar cases.

CONSTITUENTS OF BRAIN.

BAUMSTARK has examined the brain (of the horse) by improved chemical methods, and finds that the soluble salts, albumen, and organic extractive matters are present in larger proportions in the grey than in the white matter, the nuclein, combined cholesterin and lecithin, are nearly equal in the white and grey matters, but the white substance contains a preponderance of neurokeratin, free cholesterin, and protagon, and the grey contains the more insoluble albumen and connective tissue. The phosphorus contained in the ash of the white and of the grey matter is about equal. The author has contrived to isolate and study the hitherto doubtful protagon in such a way as to establish its identity.

EXPERIMENTAL RESEARCHES ON CHOLERA.

SOME experiments have been conducted by MM. Gibier and Van Ermengen with a view of ascertaining whether the subcutaneous inoculation of the comma bacilli prevents the inoculation of cholera by the alimentary tract. Guinea-pigs that had been treated with the subcutaneous injection of two cubic centimetres of the virulent culture recovered after the production of severe local lesions, which did not, however, suppurate. At the end of three weeks' inoculation of the choleraic liquid into the stomach by Koch's method or into the small intestine after abdominal section was practised,

and the vaccinated guinea-pigs died with all the symptoms of cholera. Cultivations of the liquid contained in the intestines reproduced the bacillus of Koch. The authors point out the enormous dose employed in the subcutaneous vaccination, which would correspond to half a litre for a man of average weight. These experiments obviously predicate all the essential doctrines of Koch, and seem to prove the futility of "Ferránism."

ALKALOIDS IN ORGANS OF DISEASED PERSONS.

VILLIERS has, by means of Stas's process, found a peculiar alkaloid in the viscera of two children who died of broncho-pneumonia following on measles. The alkaloid is a volatile liquid with a strong smell, causing sneezing, but without taste. It differs from the alkaloid found in cholera patients, but is identical with that found by the author in a child who died of diphtheria and broncho-pneumonia. In both cases there was fatty degeneration of the liver.

SUGAR OR GLYCURONATE?

THE copper oxidising substance in normal urine is said by M. Fluckiger not to be sugar in minute quantities, as asserted by some, but a compound of glycuronic acid with a nitrogenous product of metabolism. This hypothesis is said to be in harmony with the observation that acetone is present in diabetic urine, with the evidence afforded by the study of acetonuria, and with the result of direct investigation of the oxidation of glycuronic acid.

NEPHRECTOMY.

MR. CLEMENT LUCAS'S case of lumbar nephrectomy, mentioned in THE LANCET of July 25th, healed without suppuration. The patient was strong enough to be taken out into the grounds on the fifteenth day, and walked out of the hospital, well, within a month of the operation.

IT is stated that Professor Fuchs of Liège has been nominated as successor to the late Professor Jaeger, the ophthalmologist of Vienna. Professor Fuchs is well known to many English students, as he was formerly assistant to Professor von Arlt in Vienna, and in that capacity presided over many of the valuable courses of practical instruction in the use of the ophthalmoscope, eye operations, &c., for which Vienna is so famous. Professor Fuchs speaks English fluently.

Le Petit Journal of the 21st inst. contains a summary of Dr. Silvester's article on "Life-saving from Drowning by Self-inflation," which appeared a short time back in our columns. As our continental contemporary is reported to enjoy the largest circulation of any paper in the world, we may hope to receive ere long from some of its readers confirmation of the feasibility of the plan proposed by Dr. Silvester.

THE Paris correspondent of the *Daily News* states that M. Michelin, President of the Municipal Council, is delighted with the medical relief organisation in London, and particularly with the fever hospital on the Thames; but he and his fellow-councillors were unpleasantly impressed with the casual wards, and thought the bath, submission to which is a condition of admission, perfectly horrible.

A SPANISH medical journal hopes that, in view of the way in which medical men are sometimes treated by the public, other authorities will follow the example of the mayor of Valladolid, who has issued a notice informing the people that the medical men are all "agents of authority," and that anyone obstructing them will be liable to punishment.

DR. BOYD, who was sent out from England to Canada by the committee promoted by the Princess Louise, in charge of medical supplies, &c., for use during the recent disturbances, has, the Canadian papers state, expressed much admiration at the medical staff of the campaign, stating that it excelled any European corps he had ever seen in the field. A large quantity of medical appliances have been handed over to the custody of the Canadian Militia Department for distribution, in accordance with the wishes of her Royal Highness.

TELEGRAMS from New York announce that a serious outbreak of small-pox has taken place at Montreal. Three hundred cases of the disease have been reported to the authorities, and it is believed that an equal number remain concealed. The medical officers are vaccinating hundreds of people daily, and the Minister of Public Health has advised the members of families among whom the disease manifests itself to remain at home. All the theatres are closed, and the epidemic is exercising a serious effect upon business generally.

THE jury at Antwerp for awarding the Empress of Germany's prize of 5000 fr. and a gold medal to the inventor of the best transportable hospital for sick and wounded in time of war, and for the victims of epidemics in time of peace, will be at work from the 1st to the 10th of next month. The hospitals have to be erected and dismounted in the presence of the jury, which includes, amongst others, Dr. von Langenbeck, Baron Mundy, and Professor Longmore.

Pharmacology and Therapeutics.

THE PHARMACOLOGY OF STROPHANTHUS.

RESPECTING the physiological action of strophanthus, very little is as yet definitely known, but the following statement may, we believe, be taken as correct:—On injecting a small dose under the skin of a frog, the animal becomes less active in its movements, and respiration is observed to be shallow and feeble. The action of the heart is weakened, and no cardiac impulse can be detected through the abdominal walls. On opening the thorax and cutting into the pericardium, the heart is seen to be motionless, with the ventricle white and firmly contracted, whilst the auricles are dark in colour and distended with blood. All power of contraction in the cardiac muscular substance is lost, and the application of a powerful galvanic current fails to produce the slightest effect. The action on the respiratory centre is not very marked, for respiration continues long after the heart has ceased to beat. It is probable that the effect on the heart is induced independently of any change in the physiological condition of the cerebro-spinal nervous system. Whether the intra-cardiac nerves are influenced it is difficult to determine, as the effect is masked by the powerful action exerted by the drug on the muscular tissue. Rigor mortis is very quickly induced—a point which may some day prove of importance in medico-legal investigations. The sensory and motor spinal nerves, the abdominal and cervical sympathetics, and the muscular walls of the stomach, intestines, bladder, and uterus, are paralysed at an early stage, although not until the blood-heart has ceased to contract.

COCAINE, ATROPINE, AND CAFFEINE.

The action of cocaine on the heart, according to Dr. Beyer, is prompt and uniform. It is a stimulant in small doses; in medium doses it has an inhibitory influence on the ventricular contractions; in large doses it stops the heart in diastole. It can cause contraction of the bloodvessels independent of any action on the central nervous system. A rise in the blood-pressure, consequent upon the administration of cocaine, is the result of a direct action of the drug on the heart and bloodvessels, stimulating the former and constricting the latter; a fall in blood-pressure succeeding the rise is probably due to the action of the cocaine on the heart alone, as the

spasm of the vessels endures longer than the excitant effect on the cardiac ventricle. Dr. Beyer further finds that atropine not only increases the rate of the beat of the heart, but even the amount of work done. Atropine also exercises an inhibitory influence over the contractions of the ventricle. This alkaloid first causes contraction, and afterwards dilatation, of the bloodvessels. Cocaine given after the vessels have been atropinised causes contraction just as it does with normal vessels. It is interesting to compare the effects of atropine and cocaine on the pupils. Dr. Beyer finds that in the tortoise caffeine in small as well as in large doses produces dilatation of the bloodvessels; so that any rise of blood-pressure during the administration of caffeine can only be explained by the stimulating effect of caffeine on the cardiac contractions. The above observations are abstracted from an article published in the *American Journal of Medical Sciences*.

NAPTHALIN IN INTESTINAL CATARRH.

Dr. P. Silfverskiöld, writing to the Swedish medical journal, *Eira*, gives his experience of napthalin in eight cases of very obstinate intestinal catarrh. Although the sample he used was purchased as "purissimum," he found it produced increased diarrhœa at first, which, however, soon subsided. This unpleasant effect did not occur in cases where he had taken the precaution of washing with alcohol until the alcohol came away colourless, and then subliming as recommended by Rossbach. No colic or vomiting was produced; but in one case, the patient, a child, became pale and somewhat faint. The writer says that the drug should be discontinued if the skin become yellowish. The doses recommended by Pauli were: for children of a year or under, a grain and a half per diem; for those of five years of age, forty-five grains; and for adults, sixty to seventy-five grains—of course, in divided doses; but the writer gave larger doses than these. He finds that children do not take napthalin readily, on accoant of its strong smell. The best way to administer it to them is to suspend it in mucilage. In the case of adults it can be taken in capsules mixed with a couple of drops of the ethereal solution of bergamot. The author's cases, which were all of a chronic type with intermittent exacerbations, and which had resisted all previous attempts at treatment, were all greatly benefited, and he means to employ this method of treatment largely in intestinal catarrh. He does not appear to have tried the effect of giving the drug as an enema, as has been recommended by former writers.

TERPINE AND TERPINOL.

According to Dr. G. Guelpa even a large dose of terpine has no action on the respiratory system, and as much as thirty to forty-five grains must be given before an effect is produced on the genito-urinary apparatus. Neither albuminuria nor hæmaturia was noticed when even large doses were given, though the phosphates appeared to be in excess, which might be accounted for on the supposition that digestion was impeded by the terpine. It is also asserted that moderate doses of terpine do not affect the nervous system. Meteorism may be caused by the exhibition of larger doses. Fatal results were brought about by the employment of doses in the proportion of thirty grains of terpine for every two pounds of body weight. Terpinol seems to be similarly inactive. It is eliminated very quickly by the respiratory tract. Its favourable action on the bronchial secretions renders it a valuable remedy in catarrhal affections of these tubes.

ACTION OF CONSTITUENTS OF NEURINE.

The neurine of commerce consists of a mixture in various proportions of trimethylhydroxyethyl and trimethylvinylammonium hydroxides. Cervello, therefore, has investigated the physiological action of each of these substances separately from samples prepared artificially. They both dilate the pupil and cause suspension of respiration and complete paralysis, but the trimethylhydroxyl compound is the more active. He also finds that atropine antagonises the effect of neurine on the heart and glandular system, but does not prevent a fatal result from a lethal dose. Neurine is therefore physiologically intermediate between the curari and muscarine alkaloids.

IODO-PIXENE.

Mr. James Wheeler of Ilfracombe calls our attention to the fact that pixene is a valuable solvent for iodoform, and sends us specimens of his new preparation "iodopixene." It contains 4 per cent. of iodoform, and yields on the addition of water a permanent emulsion, the odour of which is rather agreeable than otherwise. It is strongly recommended as a disinfectant, and is said to be useful as a lotion, gargle, or injection. We have tried it in various ways, and are satisfied that it is a really valuable preparation. Pixene itself is an old favourite, and is too well known to need a detailed notice.

ARBUTIN.

Fifteen years ago Mr. Claasen announced in the *American Journal of Pharmacy* the existence of a bitter principle in the leaves of the cowberry, which he called vacciniin. This principle is identical with arbutin, as Mr. Claasen has recently proved. Arbutin is the glucoside, which is met with in many plants belonging to the Ericaceæ, and notably in Arbutus va Uursi (Lin). Vacciniin was found to resemble arbutin, not only in its microscopical characters and physical state, but also in various chemical reactions. It seems likely also that the fruit of the American cranberry contains a small amount of arbutin.

IODIDE OF SODIUM AND CALOMEL IN CONJUNCTIVITIS.

For inflammations of the conjunctiva A. Bellyarminov, writing in the Russian *Ophthalmic Review*, advises the employment of iodide of sodium in large doses internally, and local treatment at the same time by blowing calomel into the conjunctival sac. This produces, after the second application, a swelling of the eyelids and of the conjunctivæ. Sometimes, also, streaks of yellowish scales may be seen on the conjunctivæ, but they fall off in three days, and by that time all the inflammation is found to have disappeared.

A SUBSTITUTE FOR CANTHARIDES.

A Spanish beetle, *Œnas afer*, has been found by Dr. Armengue of Barcelona to possess a vesicating principle, which can be extracted and made use of like cantharides, over which it is stated to have the advantages of greater cheapness and absence of irritating effects on the kidneys and reproductive organs, and last, but not least, of entire painlessness.

THE SANITARY CONDITION OF WINDSOR.

THE "HOMES" OF THE POOR.

By ARTHUR ROBINS, M.A.,
RECTOR OF HOLY TRINITY, WINDSOR.

IF the concerted use of very strong language be any evidence of a very weak cause, then the case of the Corporation of Windsor, within its environment of invective, in defence of that which is indefensible, is but the outcome of exceeding and inevitable feebleness. It is imputed to THE LANCET, directly or indirectly, by the Corporation and its apologists, that THE LANCET Commissioner when he came here used neither his eyes nor his ears, that he acted under my direction, and that he was "inspired" by a local magazine. This is all that they have to say. Were this as true as it is untrue, the local magazine, leading about THE LANCET, would be indeed a national organ of the first magnitude. Do they dare assert that the "homes" of the poor" of Windsor are what they might be, and what they therefore ought to be? The medical officer of health accuses the Special Commissioner of "imposing" on THE LANCET; whilst the Mayor, not to be surpassed in these amenities, declares that I have "vilified" the town. I have done no such thing, as the Mayor very well knows. I have struggled to make Windsor worthy of its beautiful natural position and its great historic name; to get for its poor "human homes"; and to secure for it the place that, as the Royal borough, it ought to hold as the first of England's provincial towns. The poor creatures who inhabit the dwellings against which I have so long protested, and which your Special Commissioner condemns, are taught, by the selfish interests that oppress them, to believe that I want to ruin them all, get them turned into the streets, or their rents put up—I, who only desire for them the comforts of "human homes." Now they cast curses at me. Hereafter, when I am gone, and the regeneration of their homes is at last accomplished, I do not believe that either they or their children's children will execrate my name. The Mayor, who is also a schoolmaster, should be also a master in the control

of language and in the use of words. This is surely neither the serene nor the stately language of the magisterial chair or of the master's desk. All this irritation and vehement vituperation is because the Commissioner of THE LANCET, from his own personal observation, independently and undesignedly demonstrates that the testimony of the local magazine is true. That the regeneration of the Bier-lane district should be accomplished is admitted and proved by the acts of the Corporation. They last year agreed to "reconstruct" Bier-lane as a memorial to the late Prince Leopold. It is not a fact that I have always refused to communicate with the municipal body. My action began in this way: On Sunday morning, November 18th, 1883, I preached a sermon at Holy Trinity Parish Church here on the "Housing of the Poor," in the course of which I said: "I want from the first to avoid even the suspicion of exaggeration. Things as they are are bad enough, and now there comes this question, and I want to force it home—Who is to blame? I do not mean to say, and I do not invite you to say, until we know all about it, that there is anyone to blame. If those who are concerned with these things—the Corporation of this borough—have not got the power to fight with an evil so terrible, let us know it, and let them be armed with power to the teeth; only let us, in God's name, seek to stamp out this evil altogether, and at once. I want to be very plain in this matter. I do not want anyone to go away from this church this morning and say 'that man was casting accusations broadcast.' I scatter none." A few days later the Mayor of Windsor, accompanied by myself and my curate—and to these facts I am prepared to depose on oath—visited some of the poorest quarters in my parish. Of one "home" he said it was not fit to put a dog in, of another that it ought to be condemned as unfit for habitation, and of a third that it was only fit to turn cattle into. Finally, when he left us, he said, "In a few days I shall be seeing the Dean. I will ask him to bring the deplorable state of things that I have witnessed this day under notice in the highest quarters, so that some means of reaching all this evil may be devised." A few days later, in the council chamber, he made light of what he had seen. Although he admitted "that in most of the houses nothing had been done by the landlords for several years," the result was that "the people earnestly assured him they were quite satisfied with their quarters, and that there were no complaints." After this I have not trusted myself in the hands of the Corporation of Windsor. The condemnation of the slums of Windsor began, at all events, more than fifty years ago. They were rebuked by King William IV. as the town's reproach. Charles Knight, who was one of Windsor's foremost sons, wrote thus of the sanitation of the borough in 1859, and of the conduct of the authorities at that time: "What an Augean stable was my native town of Windsor! Yet the Court lived amongst this filthy reek, and no one heeded. Once or twice there was a talk that something must be done, and then *authority was eloquent against innovation.* Everybody knows that Garden-court does not smell of roses; but what of that? The people don't mind, and why should we?" The sanitary commissioner of the *Builder*, in March, 1871, condemned the whole of the Bier-lane district, then visited by small-pox, as insanitary and dangerous. To this was added: "The information noted was to the effect that an examination of this neighbourhood would reveal the general sanitary condition of those parts of the town inhabited by the lower orders of society, and that whatever might be discovered hereabouts would be but a specimen of the rest." Fifteen years later this is all confirmed by the corroborative testimony of the Special Commissioner of THE LANCET. His exposure of this demoralising and pernicious state of things is already producing some results. Sidney-place, where he saw "much wretchedness and bad sanitation," in some of the houses renovation and reconstruction are already going on.

By their own admissions the Corporation of Windsor and their officials, as I will proceed to show, stand self-condemned.

As THE LANCET Commissioner very forcibly puts it: "By stating that houses cannot be condemned though they possess no back windows, therefore no proper means of ventilation, and which also have no sinks, no closets, no sanitary appliances whatsoever, Dr. Casey himself stands self-condemned in the opinion of every hygienist in England, even in Europe. This assertion is so preposterous that in the other and more serious document which I mentioned above, Dr. Casey very properly speaks in quite a different strain: "The houses Nos. 30 to 40, South-place, have no back premises, the necessary outbuildings being situated in a yard behind the houses opposite. This is true, and the fault is a very serious one." These houses are owned by a medical man. Concerning the floods which frequently visit the low-lying portions of the town I have had hundreds of my people living in three feet of water for a week together. The medical officer of health, however, seeks to minimise the mischief of such a visitation when he says that "careful observation has failed to show me that the health of the inhabitants has suffered thereby.' Almost always in the early spring one or other, sometimes two or three, of the national schools in the town have to be closed because of an epidemic of measles. Last year between seventy and eighty cases of scarlatina were reported. Might not this zymotic invasion be due to the fact that the building of houses in Windsor is officially sanctioned within the known range of the floods? At the last meeting, held during this month, of the Urban Sanitary Authority, it was inquired when action was first taken for the provision of additional closet accommodation in the town. The clerk replied, *in September, 1885.* Very few of the closets *then* ordered to be provided have since been supplied. In the borough surveyor's report, which came before the Urban Sanitary Authority at their last meeting this month, the following nuisances were detailed as being in existence now. "The walls and ceilings at Nos. 1 and 3, Sidney-place, are very dirty; they should be lime-whited. The walls and ceilings of rooms at Nos. 15 and 16, South-place, are dirty, and should be lime-whited. At No. 10, Church-street, the water with the cistern in the wash-house is likely to get fouled, and it is fixed nearly close to the floor, and is without a cover. This is the only cistern that supplies the occupants of the house with drinking-water. *I also beg to report that a nuisance exists in the Bourne ditch* from stagnant pools of water. A nuisance also exists at No. 9, Gloucester-place, caused by the scullery sink pipes being connected with the main drain and a badly constructed catch-pit in the back yard. A nuisance also exists at Clarence Clump from a large ash-pit. A nuisance also exists at Haynes-court arising from a badly constructed catch-pit in the yard, which is very foul. A nuisance also exists in rear of No. 11, South-place, caused by a leaky closet-pan. I forward herewith five official notices of information as to nuisances complained of, *and eleven reports of houses without sufficient waterclosets.*" At the meeting of the Urban Sanitary Authority held on the 12th of this month, it was, upon the motion of Sir Joseph Devereux, referred to the street committee whether there should not be a house-to-house visitation in the borough. Your Special Commissioner stated that public opinion has certainly compelled the sanitary authority of Windsor to attempt a few slight improvements, but such measures *have been taken reluctantly.* On the 12th of this month the Mayor said "*he felt reluctant*" to support a proposal for a house-to-house visitation. He nevertheless went on to say "there were, no doubt, a great many houses in which there were defective drains. He had visited six houses, all in one terrace, with the object of ascertaining the condition of the drains. *They met with difficulties which were totally unexpected,* especially with regard to the bell-trap, which was now generally condemned. His experience had led him to the conclusion that a house-to-house visitation in certain neighbourhoods would be attended with advantage, and that an improvement in the drainage of some houses would be effected. The Mayor also alluded to the subject of dustbins, and said that in the houses he had just visited *the accumulation of house refuse was very offensive.*" Thus, unconsciously do the Windsor Corporation vindicate me and "extinguish" themselves. I have struggled to get a model Windsor, one that would have been after the late Prince Consort's own heart, and we shall get it yet.

Windsor, August, 1885.

ABERDEEN UNIVERSITY COURT.—At a meeting of the Court on the 20th inst. in Marischal College, a communication was submitted stating that Herman Thiele, M.B., M.C. Aber., assistant professor of anatomy, had resigned his appointment at the end of last session, and that, subject to the approval of the Court, Dr. Struthers had nominated Mr. P. W. Rattray, A.M., M.B., to act in his place. The appointment, which is for the remainder of the session, was approved.

GERMAN MEDICAL EDUCATION.

THE numerous universities of Germany, though in all their arrangements utterly unlike the ancient English universities of Oxford and Cambridge, resemble very closely the universities of Scotland, the German students on entering being, however, far more advanced in classics, mathematics, and general knowledge than it is possible for a large proportion of Scotch students to be. The system of secondary education carried on in "gymnasia" or grammar schools is so good in Germany that most of the university students bring with them a certificate of having passed the final or "abiturienten" examination of their school, which corresponds with, and is probably more difficult, than the Oxford and Cambridge examinations held at public schools for higher certificates. The course of medical study pursued is very similar to that which is carried out in the Scotch universities. For purposes of practice it is not necessary to take a Doctor's diploma, but all are obliged to pass the State examination, which is a very complete and practical test in all the branches of professional study, including papers, *viva voce* questions, operations on the dead body, and not only the diagnosis of clinical cases, but the entire charge of patients for some days under the superintendence of the examiner. The fees for this examination are only about £10, and many students to whom expense is an object, and who intend to practise in rural districts, content themselves with the State examination, and do not take the Doctor's degree, without which they cannot style themselves "Doctor," but only "Arzt," which is sometimes translated "physician" and sometimes "surgeon," but which is equivalent rather to "medical man" or "general practitioner."

The difficulty of the examinations for the Doctor's degree differs, as with us, in different universities. The fees also vary, but generally amount to about £20. Students very commonly migrate from one university to another, sometimes from desire of change, but generally for the purpose of studying under different professors of renown. Thus, for example, a man may go first to some small university, such as Rostock or Tübingen, his choice being perhaps influenced mainly by geographical considerations. After remaining there for two semesters—that is, for a winter and summer session—he may then direct his steps to Leipsic, for the purpose of studying anatomy under His and physiology under Ludwig. Next year he may go to Halle to get the benefit of Volkmann's renowned teaching in surgery. His fourth year may be spent in Strasburg, learning medicine, or pathology as it is called abroad, under Kussmaul, and midwifery under Freund. And, lastly, he may migrate to Berlin to hear Virchow on pathological anatomy and Koch on bacteriology; besides which, he may aspire to the universally respected M.D. degree of Berlin.

The regulations concerning medical practice in the Austrian Empire differ somewhat from those in force in Germany proper. No one is allowed to practise in Austria unless he has taken the degree of M.D. in an Austrian university. This implies, besides, a good preliminary education, a five-years' course, and several examinations, written, practical, and *viva voce*. The latter are called "rigorosa," and are held in public like those in Cambridge. At Cracow and Lemberg the examinations are in Polish; at the other Austrian universities in German.

There are a few German-speaking universities in addition to those in Germany and Austria. Dorpat in Russia contains an excellent medical school. The regulations there are similar to those in other Russian universities. The course is five years, at the end of which time the State examination is passed. This entitles the successful candidate to practise, and gives him the title "Vrach," which is equivalent to the German "Arzt"—general practitioner, but does not give the holder the right to style himself "Doctor." If, however, he distinguishes himself in the State examination, he is permitted to present a thesis and to undergo a further examination, and thus to become a "Doctor." There are three universities in the German part of Switzerland—Basel, Bern, and Zurich—which grant degrees, which, however, do not entitle the holder to practise, for which purpose a State examination must be passed. The universities in which German is spoken are thus distributed: Germany, 20; Austria, 6; Russia, 1; and Switzerland, 3.

THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THIS Association met at Grenoble on the 12th inst., under the presidency of M. VERNEUIL, who delivered on address on Surgery in 1885, part of which was devoted to combating prejudices with respect to surgery and surgeons, and part to a spirited and somewhat sarcastic protest against the "prurigo secundi," which he thinks so dominates the surgery of the present, and is particularly to be seen amongst specialists. When he commenced his career tenotomy was the rage, and tendons, ligaments, and muscles were divided subcutaneously in all parts of the body. A little later "resecomania" flourished, especially in Germany and England, so that some surgeons reckoned their resections by the hundred. Nowadays, when a specialist introduces an operation all specialists follow suit, but with a variation in the shape of a new instrument, so that "if a museum of operative medicine were founded, immense cases would be necessary to exhibit all the lithotomes, urethrotomes, hysterotomes, and other 'tomes,' comprising small unnamed instruments, intended, I believe, to divide strictures of the nasal duct—strictures which, be it said without bitterness, hardly ever exist, or in places where they have no need of being divided when they do exist." Gynæcology and ophthalmology compete for honours in this department, and the palm must be given to the former, for, apart from cauterisations &c. of the cervix, it has given rise to an Emmet's operation, a Battey's or Hegar's operation, an Alexander's operation, &c. The reviews and journals speak of them and praise them, so that a gynæcologist who has no "cases" to produce is little thought of. In the same strain M. Verneuil criticised other measures recently in vogue, and hinted that most of them would in process of time become as disregarded as the once prevailing fashion of an iridectomy preliminary to cataract extraction. Much had been made of late years, he said, of extirpations of the larynx, of the pharynx, of the stomach, of the uterus, of the kidneys, &c.; and he asked, "How many patients have been cured thereby? How many have derived any benefit whatever from these terrible undertakings? Barely 10 per cent. For these I admit that the operation has been of service; but for the ninety others can its abuse be denied?" He concluded: "Given a hundred cases of a disease, at a certain period one-half are operated upon; twenty years later not more than one-fourth are submitted to operation. If the results of the two series are equally successful, I conclude that of fifty of the operations in the first series, twenty-five at least were superfluous."

In the Medical Section, M. CHAUVEAU made a communication upon Preventive Inoculation for Cholera. He concludes that: 1. The subcutaneous connective tissue furnishes for the cholera virus a medium but little favourable for the proliferation of the pathogenic agent and the development of a malignant infection; this tissue is therefore very well suited to serve as the portal of the virus intended to produce an attenuated infection capable of serving as a preventive. 2. The slight degree of resemblance existing between the characters of this rudimentary infection and those of true cholera cannot be invoked to deny *a priori* the choleraic nature of the mild symptoms produced by inoculation, and to totally refute the assertion that immunity against the natural disease is imparted thereby. The efficacy of preventive inoculation is rendered probable by analogous instances, as numerous as they are well founded, which have been pursued with the greatest success in veterinary medicine. 3. In such cases, especially peri-pneumonia and anthrax, virulent infection by true pathogenic agents is undeniable, and it alone serves to confer immunity. The soluble materials contained in the very small quantity of inoculated fluid do not exert any direct action on the results of inoculation. There is no reason to suppose that the ptomaines of the choleraic broth cultures take a more active share, in spite of the relatively large quantity injected in M. Ferrán's inoculations. 4. The more lasting immunity which, according to M. Ferrán's statistics, would be conferred by a second, and especially by a third, large inoculation, proves nothing in favour of the intervention of a soluble poison. It is an established scientific fact that the *same attenuated culture* inoculated at different times *in very small quantities* increases on each occasion the immunity against the action of the undiluted virus. 5. The tolerance of the human

organism for large quantities of infective broth may probably be explained, not only by the unfavourable conditions of the medium into which the fluid is injected, but also by the feeble virulence of the latter. It is possible, indeed, that cultures of the comma bacillus in sterilised broth made under ordinary conditions are naturally attenuated. Nothing would be easier, if necessary, than to attenuate them still more by means of heat, for the comma bacillus belongs to the category of pathogenic microbes, the activity of which is very much modified by heat. 6. The amount of virulent material inoculated should be regulated by the activity of this material. It is therefore possible that M. Ferrán's fluids are so slightly active as to necessitate their injection in the dose of one cubic centimetre; but all points to the belief that the inoculations would be just as efficacious if they were practised with only two or three drops of well-prepared liquid. 7. There is little risk of creating foci of infection by the practice of preventive anti-choleraic inoculations, because the subjects inoculated are not in conditions favourable for the production and dissemination of malignant germs. 8. Existing scientific facts therefore authorise, in principle, attempts at preventive inoculation for cholera by injection into the subcutaneous connective tissue of culture liquids of the comma bacillus. They explain the harmlessness of these inoculations, but they do not permit of an *a priori* affirmation of their efficacy. Rigorous comparative experiments are necessary to demonstrate this. 9. On these grounds it is reasonable to follow M. Ferrán's inoculations with interest, in spite of the slight scientific character of his former researches and of his present practice. It is right also to control the results he has announced.

M. BOUCHARD spoke of some experimental researches on cholera which he pursued in the epidemic of 1884. He thought it might justifiably be concluded from analogy that cholera is to be regarded as an infective disease—that is, a microbe disease. The pathogenic microbe—whatever it be—produces, or incites the human organism to produce, a morbid poison (choleraic poison). To this specific intoxication is soon superadded another—viz., uræmia,—indicated by myosis. The pathogenic agent of cholera cannot exclusively inhabit the intestinal canal; and the comma bacillus is not the agent that produces the cholera poison.

M. LÉPINE read a paper on Forms of Nephritis due to Irritant Agents.

M. VOISIN discussed the subject of Hypnotism as a means of successfully treating delirium or maniacal excitement in the insane, claiming that it at once produces sleep and calms the patient, whilst it gives opportunity to modify the ideas and instincts and to bring about a return to a more natural state of mind and body. It is, also, often the means of enabling the physician to arrive at the correct cause of the mental disorder.

M. ARAM read a paper on the Character in Disease, showing how variously it is modified in different maladies.

Several other communications of minor interest were read, and the Section passed the following resolution upon the subject of quarantine:—"The Congress declares that land quarantines, sanitary cordons, and fumigations are useless and dangerous measures. Cholera should be arrested on its entrance into the Red Sea. The only precautions on land frontiers should be—medical inspection of travellers, inspection of vehicles, disinfection of linen, clothes, and articles of bedding by moist heat. Maritime quarantines should be imposed according to the limits and in the form agreed to by the International Conference at Rome. The Congress, moreover, declares that sanitation of towns by cleanliness is the only efficacious means against extension of the pestilence."

THE FINKLER-PRIOR BACILLUS.

A CORRESPONDENT of the *Boston Medical and Surgical Journal* (August 13th), at the close of an interesting account of the medical school of Bonn University, alludes to the discovery last year by Drs. Finkler and Prior of a curved bacillus in cases of cholera nostras. He appends the following translation of a summary of conclusions taken from the proof sheets of a work on the subject by Drs. Finkler and Prior, whose experiments he has witnessed:—

1. We confirm the existence of Koch's comma bacillus in the contents of the intestines and in the dejections of patients who suffered from cholera Asiatica in Genoa in 1884.

2. We have discovered the comma bacillus in the fæces of cholera nostras patients; we have thus found them directly, by means of the microscope, and we were the first to breed them in pure culture fluids as well as the first to describe them.

3. These two kinds of comma bacilli are vibrios which form genuine spirilla. In reference principally to their morphological rank, as well as in relation to the changes which they may undergo in form, the two vibrios are alike.

4. The conduct of both in cultures agrees in most kinds of culture procedures. Differences manifest themselves only under very closely related conditions of culture surfaces and temperature, and declare themselves not so much by *absolute* as rather by far more *relative* peculiarities—namely, greater energy of growth and of vitality of the vibrio of cholera nostras.

5. Of the physiological characteristics of these vibrios, we especially denote, and have already done this in an earlier paper, their marked capability of resistance against drying, against different temperatures, and against putrefaction.

6. We maintain the possibility of a condition of tenacity and consider it probable that this tenacity of existence resembles that of one of the spores of some other micro-organism of similar formation.

7. Both vibrios are pathogenic.

8. The pathogenity of Koch's vibrio is greater than that of the Finkler-Prior vibrio; this also is only a question of *relative* difference.

9. The pathogenic character does not manifest itself in all kinds of animals; far more, rather, a great number of animals possess immunity against both vibrios. They manifest themselves only under certain conditions. The animals which are susceptible to, and the conditions which are favourable for, the action of the bacilli are the same for both vibrios.

10. The evidences of the disease called forth by the vibrios in the bodies of animals possess a certain similarity to those of cholera in human beings; they are, however, not specific, but in the guinea-pig can be imitated by means of other infectious matters and by chemical poisons.

11. The causative connexion between the comma bacillus and cholera Asiatica is most probably shown by the constant presence of the bacillus, but is not to be considered as certainly proved by experiments on animals. The causal connexion between the comma bacillus (discovered by us) and cholera nostras is probably shown on the one hand by the constant discovery of the micro-organism, on the other by the extreme similarity of the symptoms of cholera nostras to those of cholera Asiatica, as well as in the biological and pathogenic peculiarities of the two comma bacilli.

12. The two vibrios can reach the blood after being injected into the intestines and are secreted in the urine. The sojourn of the Koch bacillus in the body of an animal creates an increase in the rapidity of its growth, so that thereby a still greater similarity between the two vibrios is attained in their demeanour in cultures.

THE CHOLERA EPIDEMIC.

THE largest record of cases and deaths from cholera in Spain was reached about the middle of this month, and since then the statistical accounts published have indicated no diminution of the epidemic. The daily number of cases varies now between 5000 and 6000, and the deaths between 1600 and nearly 1900, the latter figure having been all but reached on the 23rd inst. We may, however, hope that the worst stage of the epidemic has been attained, and that within a short time some diminution may take place. The few provinces that remained free from the infection when we referred to the subject last week are still apparently uninfected; and it is also satisfactory that no further extension has occurred beyond the limits of Spain. It is true that some few attacks have taken place near the Spanish lines at Gibraltar, and that odd cases are alleged to have occurred on board British vessels in the vicinity of that fortress, but nothing in the way of a cholera extension has been witnessed.

In the south of France Toulon is now definitely infected, the deaths in one day this week having reached twenty-three in number. Some cases have also occurred in the garrison and on board some of the men-of-war lying in the harbour. At Marseilles the daily number of deaths exhibited an all but steady increase up to the 20th inst., when as many as seventy-five fatal cases were recorded, but since then there has been some abatement. Up to the present date the cholera deaths in the city have numbered nearly 800, and many people have left the place in consequence. The somewhat late occurrence of the outbreak may be instrumental in preventing such a diffusion of the disease as took place last year, but the incessant communication which exists between Marseilles and other large cities of France must constitute a constant source of danger. Paris probably occupies the position of greatest peril both in this respect and on account of the gross sanitary conditions it exhibits. Neither the serious epidemic of typhoid fever which it went through nor the subsequent cholera outburst, seems to have been productive of much good in securing improved sanitation, and the stinks are stated to be as abundant there as ever.

No further history of importation into this country has been recorded, and whilst all the orders and preparations to which we have previously adverted still hold good, no further action appears to have been thought necessary by the Government. The principal point to which attention has been recently directed has been the danger connected with the collection and packing of fruits for this country, especially grapes, melons, pineapples, and raisins. It is of course impossible to assert that the practices are free from danger, but it will be rarely that persons actually sick of cholera will be engaged in any such work; and even apart from this, we are not aware of any case in which cholera has ever been imported into any country by such means. Whilst, therefore, we feel the importance for personal caution in so far as it can be exercised in the use of such fruits, we are of opinion that the circumstances hardly justify such an interference with an important trade as would be involved in forbidding the importation of fruits from Spain into this country.

WILLS OF MEDICAL MEN.

THE Scotch Confirmation under seal of office of the Commissariot of Fife of the trust disposition and settlement with three codicils and a holograph memorandum, of James Moncrieff Arnott, F.R.S., F.R.C.S., of Chapel in the county of Fife, and of 36, Sussex-gardens, Hyde-park, who died on May 27th last, granted to Mr. John Gregory Forbes, Mr. William John Dundas, Mr. Andrew Cutbush, and Miss Jane Moncrieff Arnott, the daughter, the executors nominate, was sealed in London on the 14th ult., the value of the personal estate in England and Scotland exceeding £39,000.

The will and three codicils of Joseph Bunny, M.D., late of Newbury, Berks, who died on June 2nd last, were proved on the 15th ult. by Mr. Richard Fisher, Mr. William Fisher, and Mr. Joseph Brice Bunny, the son, the executors, the value of the personal estate amounting to over £26,000. The testator bequeaths £400 and all his household furniture and effects to his wife Mrs. Mary Bunny; and there are gifts to his children and annuities to them during the life or widowhood of his wife; there are also a few other legacies. The residue of his real and personal estate he leaves upon trust for his wife for life or widowhood; then various properties are specifically devised to children, and some get special legacies. The ultimate residue of his property he leaves to all his children, Joseph Brice, Eliza, Mary Elizabeth, Edith, and Kathleen.

The will and codicil of Edward Hugh Blakeney, M.D., F.R.C.S., Deputy Inspector-General, Army Medical Department, formerly of Alresford House, Bedford-hill-road, Balham, but late of 2, Hampton-villas, King Edward-road, Rochester, who died on May 27th last at Dorking, were proved on the 17th ult. by Mrs. Charlotte Maria Blakeney, the widow, and Hugh Theophilus Weare Blakeney and Henry Weare Blakeney, the sons, the executors, the value of the personal estate amounting to £5900. The legatees under the will are the testator's wife and children.

The will of Edward Charles Chepmell, M.D., late of 22, Cavendish-square, who died on June 24th last at Florence, was proved on the 28th ult. by Mrs. Emilie Clotilde Ambrosine Chepmell, the widow, the sole executrix, the value of the personal estate amounting to £5800. The testator gives, devises, and bequeaths all his property whatsoever, real and personal, to his wife.

The will of Samuel Mason, M.D., late of 44, Finsbury-circus, and 182, Lewisham High-road, who died on March 18th last, was proved on the 8th ult. by Miss Jessie Merville Mason and Miss Merville Bertha Mason, the daughters, the executrixes, the value of the personal estate amounting to £5400. The testator bequeaths £100 each to his two surviving sons, and subject thereto he leaves all his freehold and personal estate to his three daughters.

The will of James Africanus Beale Horton, M.D., Surgeon-Major, Army Medical Department, late of Freetown, Sierra Leone, was proved in London on the 18th ult. by Mr. Nehemiah Learoyd, the value of the personal estate amounting to £3500. The testator makes provision for his wife and two daughters; and there are numerous legacies, and gifts to West African charities, and for founding a high school to be called Hortous Collegiate School.

The following legacies have recently been left to hospitals and other medical institutions:—Mrs. Lucy Eliza Lucy, of 3, College-road, Brighton, £500 to the Royal Free Hospital, Gray's-inn-road.—Mr. James Benham, of 50, Wigmore-street, Cavendish-square, manufacturing ironmonger, £100 each to University College Hospital and the Hospital for Sick Children, Great Ormond-street, both free of duty.—Mr. Thomas Emsley, of Burley in Wharfedale, Yorkshire, £1000 each to the Bradford Infirmary, Ilkley Convalescent Home, Harrogate Bath Hospital, and the Leeds General Infirmary; £500 each to Coatham Convalescent Home, the Leeds Public Dispensary, Leeds Hospital for Women and Children, and Cookridge Convalescent Hospital.—Sir Moses Montefiore, Bart., £500 each to the Jewish Convalescent Home and the Beth Holim Hospital; £300 to the Jew's Hospital at Norwood; £250 to the Ladies' Lying-in Charity for the Relief of Jewish Women; £200 each to the Samaritan Fund of St. Bartholomew's Hospital, the London Hospital, and Mrs. Palmer's Cancer Hospital; and £100 each to the Royal Sea-bathing Infirmary, Margate, the Seamen's Hospital, Ramsgate, and the Ramsgate and St. Lawrence Dispensary.—The Hon. Mrs. Caroline Cavendish, of Lyne-grove, Chertsey, Surrey, 19 guineas to the British Home for Incurables, Clapham-rise.—Mrs. Julia Greene de Freville, of Hinxton Hall, Cambridgeshire, and 11, Upper Brook-street, £100 to Addenbrooke's Hospital, Cambridge, and £50 to the Saffron Walden Hospital.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Finchley Urban District.—The year 1884, on which Dr. Turle reports, is to be a prominent one—being the last in which the natural streams flowing through the district will be fouled with sewage. Some £60,000 will be spent in connexion with a very complete system of sewerage, the outfall works for which will include a tunnel sewer about two miles long under the ridge which separates the watershed of the Lea from that of the Brent. Unfortunately only 920 acres of the 3384 to be drained can be dealt with without pumping, and Dr. Turle attributes this difficulty in the scheme to the fact that the interests or prejudices of a few have been allowed to outweigh the common interests. Owing to this the authority have to deal with their sewage within their district, notwithstanding that the land is on a hill, and the process has to be carried out on the opposite side of the district to that to which the sewage naturally gravitates. Apart from these difficulties we must congratulate Finchley on the effort it is making to secure for itself one of the prime necessities attaching to a healthy

suburb of the metropolis. The death-rate is at present most satisfactory, reaching as it did only 11·9 per 1000 in 1884; indeed, the rate for 1882, which was 14·7, is stated to be the highest recorded by Dr. Turle. The zymotic death-rate is also low, being 1·06 per 1000. Favoured as Finchley still is in this matter, it should not be unprepared as to an infectious hospital large enough for the isolation of first attacks, and this is pressed upon the authority in the report. At the close of his report Dr. Turle gives a very instructive account of the difficulties connected with the closure of a well when the owner insists on obtaining a so-called "proper supply" by deepening his existing well instead of taking the public service, and when magistrates refuse to convict on the ground that the new supply thus obtained had not been shown to be injurious to health, although its chemical ingredients give proof of its pollution to a very serious extent.

Swansea Rural District.—Mr. Rice Morgan has published an instructive report on the Swansea epidemic of enteric fever, to which we have already adverted, in so far as his district is concerned. By elimination he gets rid of a number of ordinary causes, and then gives abundant evidence implicating the town water-supply. Indeed, whilst those not using this supply escaped, the disease selected, amongst persons living where it was not available, those who had access to it elsewhere. The pollution of a reservoir by typhoid washings is explained, and to the prompt action of Mr. Ebenezer Davies, medical officer of health for the borough, in stopping the supply, is attributed the warding off of a much more serious epidemic than that which did take place.

Salford Urban District.—Dr. Tatham, in his annual report, draws attention to the fact that at the end of 1883 he pointed out that amongst the prominent defects which then existed were the following:—The unsatisfactory condition of the houses of the people and of the sewerage in the oldest parts of the borough; the filthy condition of the River Irwell; the objectionable system still adopted in certain districts for the removal of night-soil; and the continuance of the private slaughter-house nuisance amidst the houses of the people. These are certainly points of extreme importance, and it is with regret that we find from the recent report that no decided improvement has taken place with respect to any one of these matters. During 1884 typhus, enteric, and scarlet fevers were very prevalent, and they afforded an opportunity of testing the efficiency of the compulsory notification of infectious diseases which had hitherto not presented itself. As the result, Dr. Tatham states that the complementary systems of medical notification and hospital isolation now in combined operation in the borough are working smoothly and satisfactorily to all concerned. The dislike to removal to a fever hospital is rapidly disappearing in Salford, and the demand made upon the Town Council in 1884 was such that they were compelled to make additional temporary provision on their somewhat restricted site. Excellent work is in progress as to common lodging-houses, houses sublet in lodgings, dairies and milk-shops. As to slaughter-houses there is obviously but one remedy, and that is the disuse of all such as are amidst the houses of the people. The birth-rate during the year was 35·7 per 1000 living; and, corrections having been made, the death-rate was 22·4. The diseases notified under the compulsory clauses were: small-pox, 5; scarlet fever, 1154; diphtheria, 99; typhus, 35; enteric fever, 422; and puerperal fever, 14. For the purposes of sanitary survey a map has been prepared, which by means of different colours shows at once which districts have a mortality in excess of or below the average.

Hastings (Urban).—The medical officer of health (Mr. C. K. Shaw) of this urban sanitary district was able to report very favourably on its health and sanitary condition during the quarter ending June last. The death-rate from all causes did not exceed 13·0 per 1000, which was 3·1 per 1000 below the mean rate during the period in the 46 seaside and inland watering-places and health-resorts included in the Registrar-General's table. The rate from the principal zymotic disease was also satisfactorily low—only 0·41, against a mean of 0·81 in the 46 places above referred to. The proportion of infant mortality—that is, of infants under one year of age—did not exceed 8·4 per cent. of the births registered, which is low even for Hastings, more especially as it is stated that more than 5 per cent. of the births were illegitimate. With regard to these exceptionally favourable mortality statistics, it should be remembered that the constitution of the population is entirely abnormal, a fact proved by the birth-rate being so low as 21·0 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5567 births and 3364 deaths were registered during the week ending the 22nd instant. The annual death-rate in these towns, which had been equal to 21·8 and 20·5 per 1000 in the preceding two weeks, further declined last week to 19·7. During the first seven weeks of the current quarter the death-rate in these towns averaged 20·1 per 1000, against 21·9, the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 10·9 in Bolton, 12·6 in Hull, 12·7 in Bradford, and 13·2 in Oldham. The rates in the other towns ranged upwards to 24·4 in Manchester, 25·0 in Liverpool, 28·3 in Newcastle-upon-Tyne, and 30·1 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 930 and 833 in the previous two weeks, further fell last week to 697; these included 423 from diarrrhœa (126 fewer than those in the previous week), 87 from whooping-cough, 84 from measles, 44 from "fever" (principally enteric), 37 from scarlet fever, 18 from diphtheria, and only 4 from small-pox. These diseases caused the lowest death-rates last week in Hull and Huddersfield, and the highest in Salford, Portsmouth, and Preston. The annual death-rate from diarrhœa in the twenty-eight towns declined to 2·5 last week (from 3·7 and 3·2 in the previous two weeks), but ranged upwards to 4·6 in Portsmouth, 5·1 in Salford, and 13·0 in Preston; the rate in London further fell to 2·1. The greatest mortality from whooping-cough was recorded in Sheffield, Plymouth, and Cardiff; from measles in Bristol and Newcastle-upon-Tyne; from scarlet fever in Wolverhampton; and from "fever" in Nottingham and Portsmouth. The 18 deaths from diphtheria in the twenty-eight towns included 13 in London and 2 in Liverpool. Small-pox caused 7 deaths belonging to London and its outer ring of suburban districts, and not one in any of the twenty-seven provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals situated in and around London, which had steadily declined in the preceding eleven weeks from 1389 to 399, had further fallen on Saturday last to 347; the admissions, which had been 43 and 44 in the previous two weeks, declined to 41 last week. The deaths referred to diseases of the respiratory organs in London, which had been 184 and 162 in the previous two weeks, were 165 last week, and were 15 below the corrected weekly average. The causes of 70, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Birmingham, Portsmouth, Brighton, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Sheffield, Sunderland, Leicester, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 17·6, 19·8, and 20·4 per 1000 in the preceding three weeks, declined again to 19·6 in the week ending the 22nd inst., and was 0·1 below the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 11·4 and 13·9 in Leith and Dundee, to 24·0 and 31·7 in Glasgow and Paisley. The 478 deaths in the eight towns included 53 which were referred to diarrhœa, 11 to whooping-cough, 9 to scarlet fever, 3 to "fever" (typhus, enteric, or simple), 3 to diphtheria, 2 to measles, and not one to small-pox; in all, 81 deaths resulted from these principal zymotic diseases, against 82 and 116 in the preceding two weeks. These 81 deaths were equal to an annual rate of 3·3 per 1000, which was 0·8 below the mean rate from the same diseases in the twenty-eight English towns; it ranged from 0·0 in Perth, to 5·3 in Glasgow and 8·0 in Paisley. The deaths attributed to diarrhœa, which had steadily increased in the preceding eight weeks from 6 to 64, declined again last week to 53, but exceeded the number in the corresponding week of last year by 2; 34 occurred in Glasgow, and 7 in Edinburgh. The annual death-rate from diarrhœa last week in the Scotch towns was equal to 2·2 per 1000, while the mean rate from the same cause in the twenty-eight English towns was 2·5. The fatal cases of

whooping-cough in the Scotch towns, which had been 7, 13, and 23, in the previous three weeks, declined again last week to 11, of which 8 were returned in Glasgow and 2 in Paisley. The 9 deaths from scarlet fever, all of which occurred in Glasgow, showed a further slight increase upon recent weekly numbers; those from "fever," diphtheria, and measles, however, showed a decline. Of the 3 deaths referred to "fever," 2 occurred in Edinburgh and 1 in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 62 and 43 in the previous two weeks, rose again to 51 last week, but were 13 below the number in the corresponding week of last year. The causes of 67, or 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 19·8 and 22·9 per 1000 in the preceding two weeks, further rose to 27·2 in the week ending the 22nd inst. During the first seven weeks of the current quarter the death-rate in the city averaged 23·2 per 1000, the rate during the same period not exceeding 20·2 in London and 15·8 in Edinburgh. The 184 deaths in Dublin last week showed a further increase of 29 upon the numbers in the previous two weeks, and included 18 which were referred to the principal zymotic diseases, against 19 and 18 in the preceding two weeks; 7 resulted from diarrhœa, 4 from "fever" (typhus, enteric, or simple), 4 from scarlet fever, and 3 from whooping-cough, and not one either from small-pox, measles, or diphtheria. These 18 deaths were equal to an annual rate of 2·7 per 1000, the rate from the same diseases being 2·1 in Edinburgh and 3·7 in London. The deaths attributed to diarrhœa, which had been 8 and 5 in the preceding two weeks, rose again to 7 last week. The deaths referred to "fever" showed a decline of 3, while the fatal cases both of scarlet fever and whooping-cough exceeded the numbers returned in the previous week. Three inquest cases and 2 deaths from violence were registered; and 64, or more than a third of the total deaths, occurred in public institutions. The deaths both of infants and of elderly persons considerably exceeded the numbers returned in recent weeks. The causes of 32, or more than 17 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

CHILDBED MORTALITY IN LONDON MATERNITY HOSPITALS.

To the Editor of THE LANCET.

SIR,—I regret I must enter somewhat into details in order that you may appreciate the grounds upon which Dr. Duncan has called in question the accuracy of my statement to Dr. Priestley, or, as he is pleased to term it, "the very remarkable divergence" between my statement to Dr. Priestley as to the mortality at Queen Charlotte's Hospital and the lists of deaths, published in the annual report of that institution and also by Mr. Wynter Blyth in the Sanitary Chronicles for the parish of Marylebone "during the same period." Will it surprise you to know that in the Hospital Report for 1884 it only states that there were 775 women delivered, of whom five died (*vide* pages 7, 24, and 25), and that nowhere in the report does it give the exact dates of the deaths, and that in Mr. Wynter Blyth's monthly reports, or quarterly or yearly summaries, there is no means of ascertaining whether the deaths occurred in the first, second, third, or fourth week of each month. By what power of divination is Dr. Duncan able to see "a very remarkable divergence" between my statement and these reports during "the same period," when there is no opportunity afforded him for making an accurate comparison from either of these reports? Again, Dr. Duncan states that had he succeeded in discovering the office of the registrar of deaths, or even if he had been permitted to inspect the records, it would have been quite immaterial, because he found (between Feb. 1st, 1884, and July 1st, 1885) seven deaths due to the following causes: Parturition, 1; kidney disease, 2; peritonitis, 1 (? enteritis); heart disease, 1; pneumonia and pleurisy, 1; bronchitis, 1. Are we, therefore, to conclude that because the deaths arose from the above mentioned causes that they must all have occurred after Feb. 14th, and that none of them could have been infants? Does Dr. Duncan maintain that an inspection of the death certificates could not have shown that some of these deaths were between Feb. 1st and 14th, and that some of the subsequent deaths were infants? Is one to infer that an infant, in Dr. Duncan's opinion, cannot die from pneumonia and pleurisy, heart disease, bronchitis, or even peritonitis? (enteritis in this case). The above is my answer to the first of Dr. Duncan's plain questions. As to the second, I beg to state it is not a fact that sometimes women are discharged from the hospital before they are convalescent, only to be admitted into other public hospitals, where some of them die; they are transferred to homes or hospitals, according to the needs of each case. One such patient was transferred to the University College Hospital in the last stage of Bright's disease three weeks after delivery, where she died a fortnight afterwards.

As to the accuracy of Dr. Duncan's statement that Queen Charlotte's Hospital has hitherto born an unenviable reputation, I must refer him to page 8 of that hospital's report for 1884. I can assure Dr. Duncan that the institution is truly grateful to him for taking such an interest in its welfare, and also for incurring so much personal trouble in seeing that its documents are carefully kept and that its staff are accurate in their statements. It must be most gratifying to the governors, as it is to the staff, to hear that Dr. Duncan has pronounced the results obtained during a period of sixteen months and a half as "marvellous," and that the results are so wonderful as to affect the "interests of all child-bearing women," and that this gentleman considers it is our "bounden duty" to make public, without delay, the exact details of the treatment employed in order that those details may be "universally adopted." I am indeed thankful, for Dr. Duncan's sake, that I did so three weeks ago. I do not, however, flatter myself that, simple as they are, they will receive the universal adoption he prognosticates; still, with his *imprimatur*, I have hopes.

I am truly sorry to have caused Dr. Duncan so much trouble; I was misinformed. The registrar of deaths' address should have been stated by me as Great Quebec-street, not next door but one to the hospital. I exceedingly regret, however, that when Dr. Duncan was so near the hospital he did not call and ask to see the house-surgeon, secretary, or matron. He would have been courteously received, and every assistance given him to try to master the difficult problem that there were 1100 consecutive deliveries with only one death. I am sorry he should think I was annoyed at his request—the reverse is the case; both myself and the staff are delighted at the honour conferred upon us by his kind condescension to notice a thrice-closed hospital, and one of such an "unenviable reputation." We are truly grateful to him for bringing our "marvellously good results" prominently before the public, which but for his kind intervention would, I fear, have been lost sight of. If I have a regret, it is for Dr. Duncan himself, that he should mar his reputation as a scientific and statistical investigator by trying to bespatter a public charity with mud because he failed to show that its public records were inaccurate, or that my statement, as a member of the staff, to Dr. Priestley was not correct.

I am, Sir, yours truly,

Curzon-street, Mayfair, Aug. 24th, 1885. W. C. GRIGG, M.D.

*** This controversy must now close.—ED. L.

THE PERILS OF MEDICAL PRACTICE.

To the Editor of THE LANCET.

SIR,—The fact that judgments formed and pronounced by medical men on matters medical are liable to be brought into a court of law and decided upon by an ordinary judge and jury—as has been exemplified by the recent cases of medical men having been brought to trial for having signed the certificate pronouncing a person insane after having come to that conclusion—opens a question of the utmost importance to the profession of medicine.

A medical man, I take it, is in virtue of his training the best judge of a person's sanity or insanity. He can see signs in their earliest development which warrant him in

the interest of his patient and of friends having the patient put under proper treatment, whereas an ordinary judge and jury would not only be unable to recognise such signs, but, what is more important, would not know what signs to look for. Now if trained medical men are to have their judgment in such cases put to the test and decided upon by an ordinary judge and jury, who have no special training, the question arises, Will any man with any sense of personal or professional dignity pronounce a judgment in such cases? How long the medical profession as a body will permit its individual members to be tried in matters medical before another body, who are not conversant with the special requirements of a special profession, I know not; but this much may be predicted with certainty—that it will be so long as the profession of medicine allows it, and no longer. Reflection on this subject opens the question, Is this present state of things to continue? Are medical men in giving judgment in any case of insanity or any other medical case—the summing up of the evidence elicited from signs and symptoms and expressing these in language is judgment—to be liable to this judgment being questioned in a court of law? or is there in the future to be a special court of physicians before which tribunal the judgment of a medical man when brought into question is to stand or fall? I fail to see why the opinion or judgment of a medical man, formed on matters purely medical, should be permitted to be subjected to the scrutiny of an ordinary judge and jury. Surely no one will admit that a judge or a jury, who have no special training in medicine, can know better than an educated medical man. The medical man may have made a wrong judgment, but if he has I maintain that it is not consistent with the dignity of the medical profession to permit any of its members being cross-examined by a non-medical man, and dictated to by a judge who is non-medical. In the Army and Navy we have instances of officers whose discipline or knowledge is brought into question being tried by their brother officers, and in this instance dignity is displayed, while in allowing medical men to be examined as they at present are dignity is painfully absent.

I hope that this state of matters will not be permitted to exist any longer than is possible. It is a matter demanding the earnest consideration of the profession, for I believe that in all instances the medical man forms a judgment to the best of his ability and to the interest of patients and friends, and such being the case it behoves us to do all in our power—and if united we are powerful—to prevent the present state of trial existing. By all means allow patients, if they think that they have been pronounced insane when they are not insane, and so have been confined in an asylum, appeal and sue the medical man for damage; but in the first instance let us insist upon an appeal being made to a court of physicians who must pronounce whether the medical man has formed a wrong judgment or not, and then let the patient, after the court of physicians has found a man in error, sue him for damages before an ordinary judge and jury. But we cannot insist too strongly, for the sake of the dignity and honour of the profession, that the judgment or opinion of the medical man be decided to be right or wrong by proper representatives of the profession.

I am, Sir, yours truly,

August, 1885. F. H. H.

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—With reference to Dr. Dulles' criticism on my case of hydrophobia, which appeared in THE LANCET of July 18th, I would have entirely ignored his remarks had he not implied that I had committed manslaughter. He states that so long as I continued poulticing the patient was relieved, but so soon as I began the use of apomorphia and opium the patient got worse. Such a statement is most erroneous. What I did say was that the apomorphia and opium had "no effect." He also accuses me of jumping at conclusions, inasmuch that as soon as the patient refused drink, &c., I commenced to make inquiries about a dog-bite. This is a most erratic statement to make; in fact, no inquiries were made about a dog-bite until I had thoroughly weighed the symptoms, and then, and not until then, were inquiries made, which elicited the fact, beyond a doubt, that the dog was mad and was shot. The symptoms were so evident, and the autopsy of the case was so clear and entirely in accordance with the so far known facts of the pathology of rabies, that further comment on the case is unnecessary. The occurrence of pericarditis I looked upon as a coincidence, due to cold and injury and a depraved state of the blood. I may here add, in passing, that I entirely excluded pia arachnitis from the beginning, for obvious reasons too numerous to mention here. I congratulate Dr. Dulles on his keen sense of diagnosis, and also sympathise with him in his loneliness, as also in his unique position of feeling like one "crying in the wilderness."

I am, Sir, yours faithfully,

City Infirmary, E., August, 1885. W. GEM.

A HOLIDAY AT DARTMOUTH.

(From an occasional Correspondent.)

"WHERE shall I go for my holiday?" is a question more frequently debated than easily solved. After a year's steady work in any one place, a change to, and rest in, any other place is welcomed; but welcome is not an absolute quantity, and much depends on the more or less. If a man be alone, and perchance know little of the world, the choice of holiday quarters is comparatively easy, for he may find change anywhere; but if his object be to amuse and develop some big lads as well as rest himself, if he be something of a "travelled Thane, athenian Aberdeen"—critical, yet not *blasé*,—he may well be puzzled, as I was a few weeks back, in endeavouring to answer the question, "Where shall I go for my holiday?" A genial spirit guided me to this bit of the old world; and I shall ever be grateful for the happy inspiration. Literally, the town of Dartmouth is cut off from the railway system, for the station is on the other side of the water, and can only be reached by a ferry; most of the travelling into the interior is by old-fashioned coach and carrier; and, pony phaetons excepted, there is not a private carriage in the town. The people are as primitive in their ways as they are honest and hospitably kind; and, of the beauty of the scenery, it is scarcely possible to say enough in praise. As I am writing I look down the Dart, studded with yachts, into the open sea; the town is under my windows, into one of which peeps a splendid magnolia in full bloom, into the other a jessamine; in the garden below are figs, fuchsias, and peaches, as independent of glass as if they were growing in the valley of the Rhone, or on the Riviera. The long flights of steps, from Mount Galpin or Mount Pleasant into the town, remind one of Malta; and so does the harbour, in so far as the great depth of water allows ships to come close up to the depôts. The coast is rocky for the most part; but on each side of the harbour, and just beyond it, are pretty coves, with sandy beach, in which bathing is pleasurably private and perfectly safe. The boatmen are mostly Navy Reserve men; all respectful, skilful, and reliable. In a few miles' pull up the Dart may be enjoyed such varied luxuries as alternating oak forests and ripe cornfields down to the water's edge. Within a couple of hours' row is quaint old Totnes, on the borders of wild Dartmoor; just across the hills is busy Brixham, one of the great fishing centres of the kingdom; eight miles eastward is imperial-looking Torquay, with its Naples-like bay and terraced palaces and gardens; at an equal distance westward is Slapton, with its phenomenal fresh-water lake on the sea shore. Lovers of old churches will find material for reflection in St. Petrox, dating from the fifth century, and St. Saviour's, from the thirteenth, with traditions of the Spanish Armada. The opportunities for piscatorial sport are abundant throughout the district. An excellent hotel, comfortable apartments at very moderate prices, a well-stocked circulating library and an art depôt, do not exhaust the advantages of the place, for living is good and cheap. In praise of the Devonshire dairy produce not a word need be wasted. Rabbits are 1*s.* 6*d.* a couple, sirloin of beef 9½*d.*, loin chops and rump steaks 10*d.* per pound. These are prosaic details, but a good many "brother chips" may find them useful in choosing holiday quarters. Of one thing I am pretty confident;—that any tired man who takes up his quarters for a time in this good old town will remember, with gratitude and admiration, this choice bit of Rhineland on the English south coast.

LIVERPOOL.

(From our own Correspondent.)

THE STANLEY HOSPITAL.

A POWERFUL appeal was made some weeks ago by the Mayor, Mr. David Radcliffe, on behalf of the Stanley Hospital. This hospital, which was erected eighteen years ago, has for some time been found wholly inadequate to the increasing demands made upon its accommodation. Hence new wings have been added to it; but these could not be opened until a debt of £3000 had been cleared off. To meet this the Mayor opened up a special subscription at the Town Hall, and, with the exception of £250, the amount has been raised. There is every probability that the whole of the required sum will be provided and the new wings opened during the ensuing month.

CASES OF DROWNING.

Both the Lancashire and Cheshire sides of the Mersey have been the scenes of many cases of drowning in times past, and inquests are still held almost weekly on the bodies of persons found in the river, the result of accident or suicide. In the case of a boy who was carried out of his depth while bathing and drowned before help could arrive, the jury suggested that notice boards should be placed on the shore to warn bathers of the dangerous parts, with which suggestion the coroner agreed. Excellent though it was, a more general acquirement of the art of swimming is a surer means of averting these bathing fatalities. Over and over again it has been proved by fatal warnings that in the majority of instances bathers have got out of their depth and been drowned, when had they been able to swim, or even float, a few strokes would have saved them. In a second case, a girl eight years of age was drowned in a pit only 5 feet deep, and two men who passed by were afraid to jump in and save her, a piece of cowardice which was warmly censured by the coroner's jury. In a third case, the deceased, a woman aged forty-seven, deliberately tied a brick weighing seven to eight pounds to her body, and jumped into a dock. She was rescued in an unconscious state by a police officer, and taken to the Birkenhead Borough Hospital, where she rallied, but subsequently died. On a post-mortem examination, it was found that the lungs and kidneys were diseased. The jury returned a verdict of death from natural causes, accelerated by immersion, from which the coroner (Mr. Churton, surgeon) dissented, considering it a decided case of suicide.

THE SCARCITY OF WATER.

In consequence of the long prevalence of fine weather and the entire absence of rain, the threatened water famine draws daily nearer, and the authorities have been compelled to limit the supply even more, reducing the service from twelve to eight hours daily. This limited supply is not only attended with serious inconvenience, but danger also, it being impossible to secure the efficient flushing of water-closets, kitchen sinks, wet traps, &c., when for sixteen hours out of the twenty-four the supply pipes fail to act. The occurrence of rainy weather, so generally dreaded, is now being longed for, and with good reason.

AN ANTIDOTE TO PREPARATIONS AGAINST CHOLERA.

A disused quarry in the West Derby district has been used as a receptacle for all kinds of refuse, although it is situated within a very short distance of dwelling-houses. As might be expected, it has become a most intolerable nuisance, and loud complaints have been made. When every other precaution is being adopted to prevent cholera from having any strongholds here, should it be unfortunately imported from Spain or France, there can be no excuse for any such nuisance being tolerated.

NEW MEDICAL MAGISTRATE.

Dr. David Dunlop Costine, honorary physician to the Stanley Hospital, has been appointed a Justice of the Peace for the city. Having received his medical education at the Liverpool Royal Infirmary School of Medicine and the Northern Hospital, Dr. Costine commenced practice here, and has taken a very active part in public matters, having been for many years a member of the West Derby Board of Guardians, of which body he was some years ago elected chairman.

DEATH OF AN OLD LIVERPOOL SURGEON.

Dr. David Chalmers, formerly in practice here, and at the time of his death consulting surgeon to the Liverpool Northern Hospital, died at Slades, near Bramley, Surrey, on the 22nd inst. The deceased, who was in his seventy-fifth year, retired from practice about eight years ago. He leaves a widow and three children. The tidings of Dr. Chalmers' death will be received with sincere regret by many an old patient and personal friend.

Liverpool, Aug. 26th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE KNIGHT MEMORIAL HOSPITAL, BLYTH.

THE late Mrs. Knight of Crofton, Blyth, left by will the munificent sum of £6000 towards the maintenance of a hospital at Blyth as a memorial of her late husband, and, being aware of the wants of this Northumbrian seaport, it was stipulated that no part of the bequest was to be devoted to building purposes, so it became incumbent on the inhabitants and well-wishers of the place to raise funds for the erection of a hospital. This has been carried on with much spirit, and the end has been attained by a bazaar, at which an amount sufficient was raised. The building is now very near completion. This success is mainly due to the exertions of the committee, including Dr. Ward of Blyth.

TYNE PORT SANITARY AUTHORITY AND CHOLERA.

At a late meeting of the Tyne Port sanitary authority cholera precautions were very fully discussed. It was stated that a very strict watch was being kept on all vessels coming from places where cholera existed, and that the new floating hospital, when completed, would place them as a sanitary authority in an unrivalled condition. It was stated (as an opinion) that a vessel reported clear on arrival from Spain in the Tyne was free from danger; that while isolation was still of great importance, if cholera did not develop on the passage from Spain it would scarcely develop afterwards. During the months of June and July, 1035 British steamers, 561 British sailing vessels, 309 foreign steamers, and 160 foreign sailing vessels had been inspected, making a total of 2065; in these 131 sanitary defects had been found, of which the sanitary requirements had been complied with in ninety-one cases.

HEXHAM.

At the beginning of this month a fatal case of English cholera was reported as having occurred at Chollerton, in the Hexham union. It appears to have been quite an isolated case, and at the present time practitioners report the district as being free from anything in the way of cholera or epidemic diarrhœa. At a late meeting of the sanitary authority the medical officer reported a strange nuisance caused by a gamekeeper nailing very large numbers of vermin against an old schoolhouse gate, until the atmosphere in the neighbourhood became unbearable and dangerous. It was shown that the man, after the customary manner of game preservers, had nailed no less than 131 animals and birds in various stages of decomposition to the building. He was directed to take them down on pain of being summoned before the magistrates.

A BATCH OF SANITARY CASES.

A shocking case of overcrowding was brought to light lately at Sunderland. A child aged eleven weeks was found dead in bed, as proved at the inquest, from suffocation. It came out that five slept in the same bed—namely, the father, mother, and three children.—At Jarrow police-court, an old chimney-sweep was brought up, charged with having no visible means of subsistence. The prisoner, it appeared, had strong objections to personal cleanliness, it being stated that he had not washed himself since he came out of prison seven weeks ago, and no one would take him in as a lodger owing to his filthy condition. As he refused to wash himself, he was sent to prison for fourteen days so as to have the benefit of a compulsory bath.—A case was decided at South Shields lately which shows how the spirit of the law as to unwholesome food is evaded. A man was brought up for exposing for sale putrid cheese; evidence of its unwholesome nature was given by Dr. Sweet, and the magistrates had ordered

its destruction. The defendant's lawyer raised the point that the bye-law did not apply, as the word "cheese" was not included, and upon this quibble they dismissed the summons.
Newcastle-on-Tyne, Aug. 25th.

EDINBURGH.

(From our own Correspondent.)

ROYAL INFIRMARY OPHTHALMIC WARDS.

MR. GEORGE A. BERRY, F.R.C.S. Ed., has been appointed Ophthalmic Surgeon to the Royal Infirmary, with the charge of these wards, in conjunction with Dr. Argyll Robertson, who is promoted to the post of Senior Ophthalmic Surgeon, rendered vacant by the death of the late Mr. Wm. Walker. Mr. Berry holds, in addition, the posts of Surgeon to the Edinburgh Eye Dispensary, and Ophthalmic Surgeon to the New Town Dispensary; and he is Lecturer on Diseases of the Eye to the Royal College of Surgeons of Edinburgh.

SEIZURE OF UNSOUND MEAT IN EDINBURGH.

A large quantity of unsound meat has been seized in the business premises of an Edinburgh sausage-maker, as it was to all appearance on the eve of conversion into tinned and potted beef. The evidence of the assistant medical officer of health and of the principal of the Dick Veterinary College went to prove that not only was the flesh undergoing putrefactive changes, but that it showed evidence of having been obtained from animals suffering from tubercular disease. The meat was confiscated, and was ordered to be destroyed, whilst a fine of £10 was imposed upon the offender.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

A MEETING of graduates, convened at rather short notice, was held on the 21st inst. for the purpose of selecting a candidate to fill the vacancy in the University Senate. The attendance was small. Mr. Stoney proposed that Dr. Maguire should be nominated by the meeting as a fit and proper person to fill the vacancy in the Senate. To this Mr. Farrelly proposed the following amendment: "That this meeting, convened by an unsigned advertisement in yesterday's newspapers, giving twenty-four hours' notice, at a time of the year when many graduates have left Dublin, cannot be a meeting representative of the three thousand graduates of the University, and dissolves without expressing any opinion as to the vacancy in the Senate." This was lost, and after considerable discussion the meeting was adjourned to the 26th inst. The meeting referred to above was evidently intended by its promoters to act in "opposition" to the candidature of Dr. Chas. F. Knight, who has been nominated by the Graduates' Association of the Royal University of Ireland. If elected, Dr. Knight promises to support the programme of reform as advocated by the Association, and which, he asserts, is simply a claim for self-government of the university, and for placing graduates in the position of freedom and authority in their own university which is freely accorded to graduates in every other university. Dr. Knight, we may add, is an able and energetic physician, who has taken considerable interest in the working of the Royal University, which has succeeded the Queen's University, of which Dr. Knight is a distinguished graduate. At a meeting of graduates on Wednesday, however, a resolution was adopted nominating Dr. Maguire for the vacancy.

CASE OF BABY-FARMING.

Dr. Dill, borough coroner, held an inquest at Belfast last week on the body of a female child who had died the previous day. The mother was unmarried, and had left the child under the care of a woman, from whom it was removed to the house of another woman on the 7th inst., and who alleged that it was brought to her in a very delicate state of health, being covered with sores. A post-mortem examination of the child, who was four months old, showed the body to be very emaciated. It weighed only four pounds and a half; the back and the loins were covered with bedsores, and the organs were almost bloodless. Scarcely a trace of food could be found, the stomach containing only a few small pieces of curds, milk, and some watery fluid. The medical man who examined the body was of opinion that the child died from want of proper care and nourishment, which must have extended over a number of weeks; and a verdict to this effect was returned.

DUBLIN HOSPITAL SUNDAY FUND.

At a meeting of the Dublin Hospital Sunday Fund Council, held on the 21st inst., a communication was received from his Excellency the Lord-Lieutenant consenting to become patron of the fund.

A military amateur performance was given in the Queen's Theatre, Dublin, on Monday last, in aid of the funds of the City of Dublin Hospital.

The salary of Dr. Hearn, medical officer of Rathmines dispensary district, has been increased from £125 to £150 a year.

PARIS.

(From our Paris Correspondent.)

SEVERE ABDOMINAL WOUND.

ABOUT a week ago a man aged thirty-five was taken to the Hôtel Dieu with a wound of the abdomen, which he inflicted on himself with suicidal intent. He was admitted into Professor Richet's ward at 8 P.M., where he was attended to by the interne. The wound, which was about two inches long, was situated in the left hypochrondriac region just below the margin of the ribs, through which protruded a great portion of the omentum and small intestines. The transverse colon was wounded, but the stomach and the other organs in the neighbourhood escaped. The interne made an attempt at reduction of the protruded viscera, but did not succeed, and the patient had to wait for the surgeon's visit, which took place at about nine o'clock the following morning. Dr. Peyrot, who is acting for Professor Richet during his vacation, enlarged the wound in the abdominal wall, and after having sutured that in the intestine and cut off a portion of the omentum, returned all to the abdominal cavity, the operation and dressing having been performed on strict Listerian principles. Symptoms of peritonitis, however, soon set in, and the patient died about thirty hours after his admission. No autopsy was allowed, as the body was removed for judicial investigation.

THE ADVANTAGES OF LISTERISM.

There were other interesting cases in the same ward, but I may just mention one that seemed to me to realise the advantages of the principles of Listerism, particularly when it is remembered that in former times such a case would have been almost inevitably doomed to the loss of the limb or resulted in the death of the patient. The case was that of a man about thirty years of age who had phlegmonous inflammation occupying the whole of the left lower extremity, the indirect cause of which was a bruise over the patella, caused by a fall, which suppurated and was followed by lymphangitis. Dr. Peyrot made half a dozen free incisions in different parts of the limb to let out the matter. He then introduced drainage tubes through which was injected a solution of carbolic acid, and the limb was comfortably put up in cotton-wool. The dressing was not disturbed more than once or twice a week, and, on visiting the ward yesterday morning, I was struck with the healthy aspect of the limb as well as of the patient, although he has been about three weeks in the hospital.

INCREASE IN THE NUMBER OF CRÈCHES.

It has been proposed at the Municipal Council of Paris that the number of crèches should be increased to meet the growing wants of the population. There are at present thirty-five in Paris, which are maintained partly by the town and partly by charity. These crèches, the first of which was founded in 1844, have rendered great service to the working classes. They are generally open every day from 6 A.M. to 6 P.M., Sundays and fête days excepted. For sucking infants the mothers may go to the crèches as often as they please to suckle them; for those that are weaned a

supply of food is taken for the day. Most of the existing crèches are under religious supervision, and the Municipal Council, in voting a large sum to meet the increased demands, refuses its support to crèches of this class.

EXPERIMENTS WITH THE MICROBE OF TYPHOID FEVER.

At a recent meeting of the Academy of Sciences M. Tayon reported that he had inoculated himself and several of his friends with the microbe of typhoid fever. The general symptoms produced were insomnia, anorexia, pinched countenance, and liquid stools. There were also some local symptoms. A second inoculation, practised after complete re-establishment, produced no effect. No comment was made, but it was left to the Academy to form its own conclusions.

ADMISSION OF WOMEN TO THE HOSPITAL INTERNAT.

In a previous letter I informed you of the admission of women as hospital externes. A decree from the Prefect of the Seine has just authorised them to compete for the hospital internat. This is just what was anticipated; but the decree does not mention whether special lodging arrangements have been made for them.

THE SANITARY CONDITION OF COLLEGES.

The Minister of Public Instruction has ordered that the absence of pupils from the different colleges during the vacation be taken advantage of, that the buildings be thoroughly cleansed, the bedding &c. disinfected, and the supply of drinking-water and the thorough ventilation of the buildings be properly attended to. This is a move in the right direction, as hitherto these institutions have been in a notoriously insanitary condition.

M. CLEMENCEAU.

M. Clemenceau, Deputy for Montmartre, the well-known leader of the Radicals at the Chamber of Deputies, and who is also a physician, is laid up with an attack of hydrarthrus manifestly connected with a rheumatic taint. He is attended by Dr. Debove, who has removed the fluid from the joint, and the patient is doing well.

Dr. Lancereaux has made a proposition at the Council of Hygiene that measures should be immediately taken for the incineration of the bodies of animals dying from charbon.

Note.—In my letter of last week, referring to the accident to Dr. Ricord, the name was misprinted "Record."

Paris, August 25th.

THE SERVICES.

THE SOUDAN CAMPAIGN.

IN the distribution of honours to the officers who took part in the Soudan campaign several members of the Medical Department share. The Queen has been graciously pleased to give orders for, amongst others, the following promotions in, and appointments to, the Most Honourable Order of the Bath:—To be an Extra Member of the Military Division of the Second Class, or Knights Commanders of the said Most Honourable Order—viz., Thomas Crawford, Esq., M.D., Director-General of the Army Medical Department. To be Ordinary Members of the Military Division of the Third Class, or Companions of the said Most Honourable Order—viz., Deputy Surgeon-General Stewart Aaron Lithgow, M.D., of the Medical Staff; Deputy Surgeon-General Geo. Langford Hinde, of the Medical Staff; and Brigade Surgeon James Howard Thornton, M.B., of the Bengal Medical Department.

In a despatch to the Secretary of State for War, dated Cairo, June 15th, General Lord Wolseley states that during the campaign the Medical Department was administered with ability by Deputy Surgeon-General O'Nial. He had never seen the sick and wounded better cared for. The arrangements were good, and the medical officers worked with untiring zeal and great devotion to their duties. At Suakin Deputy Surgeons-General Barnett and Hinde directed all medical matters with great credit to themselves and to their department. Both there and on the Nile the work done by the nursing sisters was highly appreciated by doctors and patients. Lord Wolseley also recommends to the favourable consideration of the Secretary of State for War the officers of his personal staff, amongst whom was Dr. Simson Pratt. In the list of officers whose names are published as having rendered services deserving of special mention appear the following members of the Medical Staff: Deputy Surgeon-General J. O'Nial, C.B.; Deputy Surgeon-General S. A. Lithgow, M.D.; Deputy Surgeon-General O. Barnett (since deceased); Deputy Surgeon-General G. L. Hinde; Surgeon-Major E. C. Markey; Surgeon-Major G. C. Gribbon; Surgeon-Major R. Waters, M.D.; Surgeon-Major G. E. Will; Surgeon-Major C. H. Harvey, M.D.; Surgeon-Major T. F. O'Dwyer, M.D.; Surgeon-Major F. Ferguson, M.D.; Surgeon-Major B. B. Connolly; Surgeon T. J. Gallwey, M.D.; Surgeon W. H. Briggs; Surgeon J. Magill; Surgeon W. B. Allin; and Surgeon H. L. Donovan, M.D.

The Queen has been graciously pleased to approve of the following promotions being conferred upon the undermentioned officers of the Medical Staff in recognition of their services during the recent operations in the Soudan:—Deputy Surgeon-General John O'Nial, C.B., and Deputy Surgeon-General Oliver Barnett, C.I.E. (since deceased), to be Surgeons-General. Surgeon-Major Robert Waters, M.D., Surgeon-Major George Elmsly Will, and Surgeon-Major Charles Hamilton Harvey, M.D., to be Brigade Surgeons. Surgeon Thomas Joseph Gallwey, M.D., Surgeon William Simson Pratt, M.B., Surgeon William Hamilton Briggs, and Surgeon William Briggs Allin, M.B., to be Surgeons-Major.

The Secretary of State for War has sanctioned the payment of a gratuity of six months' pay to Surgeon J. Magill, M.D., Coldstream Guards, in consideration of the wound he received in action at Abu Klea on Jan. 17th, when he was in charge of the Guards division of the Camel Corps. It has been stated that this officer, being struck, actually removed the bullet from the wound himself during the progress of the action.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon S. Black Roe, M.B., C.B., to be Deputy Surgeon-General, vice Oliver Barnett, C.I.E., deceased; Brigade Surgeon Edmund Greswold McDowell, C.B., is granted the local and honorary rank of Deputy Surgeon-General whilst serving as Principal Medical Officer at Woolwich, vice Saml. Black Roe, M.B., C.B.; Surgeon-Major John Alexander Shaw, M.D., is granted retired pay, with the honorary rank of Brigade Surgeon.

ADMIRALTY.—The following appointments have been made:—Surgeon George A. Dreaper, to the *Alecto;* Surgeon Henry E. South, to the *Impregnable*, additional, for service in the *Nautilus;* Surgeon Sydney H. Youel, to the *Thunderer;* Surgeons William E. Home, M.B., Richard A. Fitch, Henry B. Beatty, William Spry, Percy E. Maitland, George H. H. Symonds, M.B., Jas. J. Walsh, M.B., and William J. Winckler, to the *Duke of Wellington*, additional, for Haslar Hospital; Surgeon John Moore, M.D., B.A., to the *Duke of Wellington*, additional, for disposal; Surgeon Cyril J. Mansfield, M.B., to the *Asia*, additional, for disposal; Surgeons Robert Hickson, Herbert P. Shuttleworth, John Lowney, and George D. Trevor Roper, additional, to the *Royal Adelaide;* Surgeon Octavius S. Fisher, additional, to the *Impregnable;* and Surgeon John S. Fogerty, additional, to the *Cambridge*.

RIFLE VOLUNTEERS.—1st Suffolk: Acting Surgeon George Cordy Edwardes-Ker resigns his commission.—2nd Volunteer Battalion, the York and Lancaster Regiment: Surgeon John Blackburne is granted the honorary rank of Surgeon-Major.—3rd Volunteer Battalion, the Duke of Wellington's (West Riding Regiment): Surgeon Edward Chaffers resigns his commission.

VOLUNTEER MEDICAL STAFF CORPS.—Surgeon and Honorary Surgeon-Major Arthur Trehern Norton, from the 12th Middlesex (Civil Service) Rifle Volunteer Corps, to be Surgeon; Acting Surgeon Francis Lawrance Stephenson, from the 3rd Volunteer Battalion, the Queen's Own (Royal West Kent Regiment), to be Surgeon.

Obituary.

CARLO MAGGIORANI.

PHYSICIAN, man of letters, and statesman, this Nestor of Roman medicine died on the morning of Wednesday, the 12th inst., at his well-known residence, the Villa Maggiorani, on the Monte Mario.

He was in his eighty-sixth year, having been born with the century at Campagnano. His career in the faculties of Arts and Medicine at the Roman University was a brilliant

prelude to the sixty years of work by which he laid his country and compatriots under lasting obligations. He was early promoted to one of the principal chairs in the Sapienza, and this, while practising assiduously as a consultant in the city and province, he held with increasing lustre, till, like not a few generous spirits of his own profession and generation, he was, for political reasons, expatriated and deprived of his academic position and emoluments. For years the Pontifical Government refused to readmit him to Roman citizenship; and it was only in 1870, when the flag of United Italy waved from the Capitol, that he could resume his classes at the university and his professional *clientèle*. Victor Emanuel, by special decree of Nov. 15th, 1871, created him a Senator of the kingdom of Italy, and other honours, perhaps more prized by him, followed rapidly from the Royal Academy of the Lincei and the Roman Academy of Medicine.

To both these learned bodies, particularly to the latter, of which he was for many years president, he contributed a large number of papers, chiefly on medicine and its cognate sciences. Their Transactions teem with evidence of his powers of inductive research and literary exposition; while the pages of the *Gazzetta Medica di Roma*, of which he was one of the earliest and ablest promoters, attest the interest he maintained till within a few months of his death in the practical work of his profession. In October, 1876, he read a remarkable paper on Andrea Cesalpino's claims to the discovery of the Circulation of the Blood; and though Harvey's transcendent merits remain undimmed, there is no doubt that the Roman professor's vindication of his great Pisan compatriot contained much that had escaped previous historians of medicine, and proved that the discovery in question was a far more gradual "birth of Time," to use Bacon's expression, than had commonly been supposed.

Duke Leopold Torlonia, the pro-syndic of Rome, conveyed to the Maggiorani family a touching tribute, in the name of the municipality, to the merits of the illustrious deceased as a physician, a teacher, a legislator, and a citizen. "Very rarely," runs the pro-syndic's letter, "does the world see combined in an individual so many high qualities and rare gifts as shone in the character of Carlo Maggiorani. His intellect was commanding, his conscience pure, his culture refined, his patriotism heroic. If his bereaved sons have lost the best of fathers, Rome has lost the best of citizens—an honour to medical science." Numerous telegrams in the same sense reached the Maggiorani family from all parts of Italy as soon as the death of its head became known; and on Friday, the 14th inst., his mortal remains were followed to their last resting-place in the Campo Verano by a numerous and distinguished cortège, which included representatives of the Senate, the municipality, the army, the universities, and the Medical Academy of Rome. Among the wreaths laid on the bier, the most conspicuous was that contributed by the Royal Academy of the Lincei, a body which owes much to the life-long co-operation of Carlo Maggiorani.

THOMAS HILL PATTISON, M.D.

THOMAS HILL PATTISON, whose death occurred on July 10th, was born in 1809 in Edinburgh, and had consequently entered his seventy-sixth year. He was educated at the High School, and subsequently at the university of his native city, at which latter institution he studied under Joseph Bell and Dr. Knox. In 1830 he obtained the licence of the Edinburgh College of Surgeons, and in 1831 the degree of Doctor of Medicine at the university. After a period of study at Paris he entered the naval service of the Hon. East India Company, and, after passing a few years as assistant-surgeon, returned to Edinburgh and commenced to practise. At this time his ambition was to prosecute specially the surgical department of the profession, but circumstances changed his views; and, engaging in general practice, his attention was ultimately chiefly directed to obstetrics, in which he obtained considerable success. In 1849 he was admitted to the Fellowship of the Royal College of Physicians, Edinburgh, and for some years occupied a seat on the Board of Examiners of that corporation. In 1840 he assisted in the formation of the Edinburgh Obstetrical Society, and in 1862 and 1863 was elected president of that body; in 1845, 1858, and 1864 he occupied the post of vice-president. It was to this Society that Dr. Pattison addressed his contributions to the literature of the profession, and from his first paper in February, 1847, on Polypus of the Uterus and Rectum, to his last in April, 1871, he made altogether nineteen communications on practical subjects, several of much interest connected with midwifery, but two having reference to infantile diseases.

THOMAS COLAN, M.D.

ON the 25th inst. the death occurred at Halliwell, near Bolton, of Dr. Thomas Colan, R.N., Inspector-General of Hospitals and Fleets, at the early age of fifty-four. In 1852 Dr. Colan obtained the diploma of Member of the Royal College of Surgeons, and in 1853 he took the degree of M.D. at the Queen's University, Ireland. He entered the Royal Navy in 1853, served on board the *Royal George* during the two campaigns in the Baltic, and also on board the *Beagle* in China, being present at the capture of the Peiho Forts. He also served in the Ashantee war, being specially promoted to the rank of fleet surgeon for his services. In 1875 he went out in the *Alert* as principal medical officer in the Arctic Expedition under Sir George Nares, and it is feared that the privations endured by him whilst engaged on this service conduced materially to his untimely death. From 1877 to 1880 he was employed as Deputy Inspector-General at the Royal Naval Hospital at Jamaica, during which time yellow fever broke out twice at Port Royal. Besides receiving the Baltic, China, Ashantee, and Arctic medals, Dr. Colan was awarded Sir G. Blane's gold medal for his medical journal on the West Coast of Africa for 1872. He retired from the service in 1883.

W. P. MACKAY, M.D.

WE regret to record the death of the Rev. Dr. W. P. Mackay, of Hull, which occurred on the 22nd inst. at Portree, Isle of Skye, in the neighbourhood of which place he had been spending his summer holiday. The cause of death was congestion of the lungs produced by sudden immersion through slipping off a gangway whilst disembarking from a steamboat. Dr. Mackay was born at Montrose, was educated for the medical profession, and was qualifying for the M.D. diploma at the time when he finally decided to devote his life to the ministry, though it was not until after he was ordained and had settled at Hull as minister of the Presbyterian Church, Prospect-street, that he passed the examination for the degree of M.D. About eighteen months ago, after taking part in a public meeting, he was seized with an apoplectic fit, which prostrated him for a long time, and since then he has not enjoyed vigorous health. He was a man of great mental capacity, lively wit, and considerable eloquence, his style of address being unique. He was highly and deservedly popular in the town where he resided. The deceased was forty-six years of age, and had been in Hull for sixteen years.

Medical News.

UNIVERSITY OF LONDON.—The following candidates have passed the Intermediate Examination in Medicine for Honours, recently held:—

ANATOMY.

FIRST CLASS.

Dean, Henry Percy, B.Sc. (Exhibition and Gold Medal), University College.
Taylor, Frederick Howard (Gold Medal), London Hospital.

SECOND CLASS.

Kanthack, Alfredo Antunes, B.A., University College, Liverpool.
Eq. { Ashworth, Percy, B.Sc., Owens College.
Eq. { Tubby, Alfred Herbert, Guy's Hospital.
Eq. { Ledward, Milton Prentice, Owens College.
Eq. { Smith, Guy Bellingham, Guy's Hospital.

THIRD CLASS.

Jecks, Cyril William, University College.
Tunstall, John Ogle, University College.
Rennie, George Edward, B.A. Sydney, University College.

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

FIRST CLASS.

Rennie, George E. (Exhibition and Gold Medal), University College.
*Starling, Ernest Henry, Guy's Hospital.
*Kanthack, Alfredo Antunes, University College, Liverpool.
Ashworth, Percy, Owens College.
Fisher, Theodore, Guy's Hospital.

SECOND CLASS.

Eq. { Ashe, Evelyn Oliver, London Hospital.
Crouch, Charles Percival, St. Bartholomew's Hospital.
Tubby, Alfred Herbert, Guy's Hospital.

THIRD CLASS.

Ledward, Milton Prentice, Owens College.
Colman, W. Stacy, University of Edinburgh and University College.
O'Reilly, George Hartley, King's College.
Macdonald, Isabella Macdonald, London School of Medicine for Women.
Burt, Cyril Cecil Barrow, Westminster Hospital.

ORGANIC CHEMISTRY.

FIRST CLASS.

Starling, Ernest Henry (Exhibition and Gold Medal), Guy's Hospital.
*Dean, Henry Percy, University College.

SECOND CLASS.

Eq. { Wilkie, John, St. Bartholomew's Hospital.
Williams, William Griffith, St. Bartholomew's Hospital.
Eq. { May, William Page, B.Sc., University College.
Scott, Arnold, Guy's Hospital.

THIRD CLASS.

Tunstall, John Ogle, University College.
Colman, W. Stacy, University of Edinburgh and University College.
Roberts, John Lloyd, B.A., B.Sc., Guy's Hospital.

PHYSIOLOGY AND HISTOLOGY.

FIRST CLASS.

Starling, Ernest Henry (Exhibition and Gold Medal), Guy's Hospital.
Ashworth, Percy (Gold Medal), Owens College.
Kanthack, Alfredo Antunes, University College, Liverpool.
Melland, Brian, Owens College.
Roberts, John Lloyd, Guy's Hospital.
Wilkie, John, St. Bartholomew's Hospital.

SECOND CLASS.

Jecks, Cyril William, University College.
Taylor, Frederick Howard, London Hospital.
Canney, Henry Edward Leigh, University College.
Rennie, George Edward, University College.
Black, George, Guy's Hospital.
Colman, W. Stacy, University of Edinburgh and University College.

THIRD CLASS.

May, William Page, University College.
Williams, William Griffith, St. Bartholomew's Hospital.

* Obtained the number of marks qualifying for a Medal.

BRITISH MEDICAL SERVICE.—The following is the list of candidates who were successful for appointments as Surgeons in this Service at the competitive examination in London on Aug. 10th and following days:—

	Marks.		Marks.
M. T. Yarr	3080	R. H. Cox	3350
B. L. Mills	2880	A. Kennedy	3350
L. P. Mumby	2880	R. C. Gordon-Dill	3345
C. H. Melville	2870	P. T. Skerrett	3340
J. B. Wilson	2810	H. M. Ramsay	3300
H. Rayner	2765	W. B. Stokes	2280
C. A. Renny	2707	J. B. Buchanan	2270
R. E. Genge	3680	D. Simpson	2270
J. Kearney	2680	E. H. Locker	2215
H. Thiele	2679	J. Rose	2182
F. A. Saw	2625	T. G. Lovie	2180
G. S. Cardew	2590	H. M. Adamson	2160
H. Cocks	2510	T. H. Corkery	2120
W. J. Lee	2500	W. P. Squire	2120
F. W. Hennessy	2475	W. R. Crooke	2110
H. W. M. Kendall	2440	C. L. Walsh	2110
J. G. Black	2420	H. H. Brown	2100
H. P. G. Elkington	2400	S. J. W. Hayman	2080
F. W. G. Hall	2380	J. P. S. Hayes	2070
G. S. Tate	2380	J. J. O'Donnell	2070

NAVAL MEDICAL SERVICE.—At the competition for commissions in this Service, held on Aug. 10th and following days, in the Hall of the University of London, Burlington-gardens, the undermentioned gentlemen were the successful candidates:—

	Marks.		Marks.
W. E. Home	3200	J. Moore	2260
R. A. Fitch	2900	C. J. Mansfield	2100
H. B. Beatty	2710	R. Hickson	2060
W. Spry	2700	H. P. Shuttleworth	2005
P. E. Maitland	2380	J. Lowney	2000
G. H. H. Symonds	2360	G. D. Trevor-Roper	1980
W. J. Winckler	2330	O. S. Fisher	1960
J. J. Walsh	2275	J. S. Fogerty	1900

INDIAN MEDICAL SERVICE.—The following is a list of the candidates for this Service who were successful at the competitive examination held at Burlington House on Aug. 11th, 1885:—

	Marks.		Marks.
H. R. Woolbert	3208	J. M. Cadell	2827
G. H. Baker	3005	A. C. Younan	2825
T. Grainger	2915	J. R. Adie	2822
A. R. Edwards	2830	A. W. Alcock	2760

Twenty-two candidates competed for eight appointments; twenty-one were reported qualified.

UNIVERSITY OF EDINBURGH.—At the graduation ceremony recently held at this University the following degrees were conferred:—

DOCTOR OF MEDICINE.—H. J. Barron, England, M.B. and C.M., 1883; R. Bowes, Scotland, M.B. and C.M. (with second-class honours), 1881; S. W. Bryant, England, M.B. and C.M., 1882; H. L. Calder, Scotland, M.B., 1878; W. B. Carstairs, India, M.B. and C.M., 1877; B. W. Cawthorne, England, M.B. and C.M., 1880; R. P. Cox, M.B. and C.M., 1879; W. Cumming, Scotland, M.B. and C.M. (with second-class honours), 1883; C. V. Delépine, France, M.B. and C.M., 1881; D. R. Doble, Scotland, M.B. and C.M., 1882; A. C. Doyle, Scotland, M.B. and C.M., 1881; *H. Drinkwater, England, M.B. and C.M., 1877; J. Ewart, Scotland, M.B. and C.M., 1880; E. Fraser, England, M.B. and C.M., 1882; F. Fraser, England, M.B. and C.M., 1881; *J. L. Gibson, Australia, M.B. and C.M. (with first-class honours), 1881; F. W. Grant, B.Sc., Scotland, M.B. and C.M., 1882; L. Grant, Scotland, M.B. and C.M., 1881; W. F. Grant, India, M.B. and C.M., 1882; H. Gordon, Scotland, M.B. and C.M., 1868; J. Gordon, B.A., Scotland, M.B. and C.M., 1867; *R. H. Greves, England, M.B. and C.M. (with second-class honours), 1879; C. B. Gunn, Scotland, M.B. and C.M., 1882; H. P. Hallows, England, M.B. and C.M., 1882; T. S. H. Hincks, England, M.B. and C.M., 1874; A. C. Keep, England, M.B. and C.M., 1882; *C. Kennedy, Scotland, M.B. and C.M., 1881; H. D. King, M.A., B.Sc., England, M.B. and C.M., 1881; W. Knott, England, M.B. and C.M., 1880; *A. M'Cormick, Scotland, M.B. and C.M., 1880; F. A. Maciver, England, M.B. and C.M., 1883; J. M'Lintock, Scotland, M.B. and C.M., 1878; A. Macvie, Scotland, M.B. and C.M., 1882; B. L. Mills, England, M.B. and C.M., 1882; R. B. Mitchell, Orkney, M.B. and C.M., 1879; C. Moon, Scotland, M.B. and C.M., 1866; W. Murdoch, Scotland, M.B. and C.M., 1877; J. A. Myrtle, England, M.B. and C.M., 1882; A. J. Neale, England, M.B. and C.M., 1882; *E. F. Neve, England, M.B. and C.M., 1882; *D. N. Paton, B.Sc., Scotland, M.B. and C.M. (with first-class honours), 1882; L. H. Pegler, England, M.B. and C.M., 1878; R. Robertson, Scotland, M.B. and C.M. (with first-class honours), 1878; A. Simpson, M.A., Scotland, M.B. and C.M., 1878; A. T. Sloan, Scotland, M.B. and C.M., 1882; W. Stewart, England, M.B. and C.M., 1878; E. J. Sykes, England, M.B. and C.M., 1880; A. C. Sym, Scotland, M.B. and C.M., 1883; *J. Symington, England, M.B. and C.M. (with first-class honours), 1877; C. J. Tiffen, England, M.B. and C.M., 1882; W. J. Treutler, Bengal, M.B. and C.M., 1866; J. C. Voigt, Cape of Good Hope, M.B. and C.M., 1882; J. Walther, England, M.B. and C.M., 1883; W. P. Warburton, Prince Edward Island, M.B. and C.M., 1865; E. H. Warner, England, M.B. and C.M., 1883; J. B. Wilkinson, England, M.B. and C.M., 1883; C. H. Willey, England, M.B. and C.M., 1880; W. Wilson, England, M.B. and C.M. (with first-class honours), 1878.

* Awarded Gold Medals on account of the great distinction of their Theses.

BACHELOR OF MEDICINE AND MASTER IN SURGERY.—R. T. Allan, Scotland; J. Anderson, Ireland; J. A. Ashcroft, England; J. W. Astles, England; J. M. Balfour, Scotland (first-class honours); R. N. Bell, Canada; C. N. Bensley, India; R. Beveridge, Scotland; J. W. Black, Scotland; R. Blair, Scotland; R. Bone, Scotland; G. L. Bonnar, Scotland; C. C. Bose, India; L. J. H. Bouchet, Mauritius; R. Bowman, Australia; A. Brewster, Scotland; H. Brooks, England; H. Brown, England; M. Bruce, Scotland; R. N. Buist, India; W. Burns, Scotland; R. F. Burt, England; W. J. Cameron, Scotland; A. J. A. Campbell, Scotland; E. Chamberlayne, England; C. Charleton, England; R. Chetham-Strode, New Zealand; P. Parthasaradhichettil, India; S. F. Clark, England; E. W. Clarke, B.Sc., England; F. G. Clemow, England (second-class honours); F. W. Collison, England (second-class honours); J. Cram, M.A., Scotland; A. J. Cross, England; D. N. P. Datta, India; A. Davidson, Scotland; R. Davidson, M.A., Scotland; J. H. Dawe, England; J. W. Dawes, England; J. Delépine, France; H. G. Dickman, Ceylon; K. M'K. Douglas, Scotland (second-class honours); W. O. Dow, Scotland; W. M. Eaton, South Africa; G. G. Eyre, B.A., England; W. C. Faulkner, England; L. G. Fischer, England; A. Fisher, M.A., Scotland; H. S. R. Freeborn, England; E. S. Fry, England (first-class honours); J. Garvie, Scotland; J. E. Gemmell, England; J. Glegg, Scotland; J. G. Glover, Scotland; R. Gordon, Ireland; D. M. Greig, Scotland; C. W. M. Grier, Australia; T. H. Griffith, Barbadoes; J. Griffiths, Wales (second-class honours); W. B. T. Gubbin, England; J. A. Guthrie, England; J. S. Haldane, M.A., Scotland; S. P. Hallows, England; J. T. Harvey, Australia; J. H. Helme, Scotland; T. A. Helme, England (second-class honours); W. C. Helme, England; F. W. Hennessy, India; G. V. Hewland, England; J. R. Hill, Demerara; H. Hirst, England; J. J. Hoffman, Cape of Good Hope; W. E. Home, B.Sc., Ireland; A. Hood, Scotland; R. E. Horsley, Australia; A. W. Hughes, Wales; S. Hughes, England; J. Hunter, M.A., Scotland; R. Jackson, England; H. Jamieson, Scotland; H. John, Wales; G. F. Johnston, New Brunswick (second-class honours); T. Johnstone, M.A., Scotland; S. B. Jones, Wales; R. C. Joyce, Wales; E. C. Kingdon, England (second-class honours); F. Kraemer, M.A., Hungary; J. C. Lamont, England (first-class honours); D. J. Lawson, Scotland; E. L. Lees, India; C. A. S. Leggatt, England; T. A. Leishman, Scotland; R. F. C. Leith, M.A., England, (first-class honours); C. J. Lewis, England (first class honours); W. M. Little, Singapore; R. H. Lacy, England (first-class honours); J. S. M'Cracken, Scotland; D. M'Darmiad, Scotland; H. C. M'Ewen, B.Sc., Scotland; W. G. M'Fee, England; Wm. M'Kay, M.A., Scotland; F. W. Mackenzie, New Zealand; F. L. Mackenzie, Scotland; W. R. M'Kinnell, Scotland; C. J. R. Maclean, Scotland; H. R. Maclean, Australia; W. H. Maclean, New Zealand; R. MacLelland, Scotland; J. M. Macleanan, M.A., Scotland; A. R. Macmillan, Australia; R. S. Marsden, D.Sc., England; D. G. Marshall, England; J. W. Martin, Scotland; D. J. Mason, Scotland; C. G. Matthew, Scotland; R. T. Meadows, Canada; C. H. Melville, India; H. B. Melville, Scotland (second-class honours); W. F. Menzies, Canada; W. C. Miller, India; W. G. Mitchell, M.A., Scotland; D. M. Moir, M.A., India; R. S. Morrison, Scotland; E. Morton, England; E. J. B. du Moulin, Australia (second-class honours); W. Murphy, England; W. R. Nasmyth, Scotland; F. A. Neal, India; J. H. Neethling, Cape of Good Hope; W. B. Nisbet, England; E. S. Nutting, England; G. Ozanne, Guernsey; J. W. Pare, England; S. Partridge, England; A. Paterson, India;

I. Paterson, Scotland; M. Paterson, Scotland; H. H. Pridie, Scotland; J. H. Pringle, Australia; E. T. Pritchard, England; S. H. Puckle, B.A., Australia; A. Raimes, England; C. A. Renny, Russia; F. G. Retief, Cape of Good Hope; J. Richards, Wales; J. T. Richards, B.Sc., England; J. B. Ridley, England; E. Roberton, New Zealand; G. M. Robertson, India; T. H. Robinson, England; A. MacLeod Ross, Canada (second-class honours); W. L. Ross, Scotland; G. A. Scott, Scotland; W. E. S. Scott, England; H. Scurfield, England; C. F. D. Shaw, England; J. Simpson, Scotland (second-class honours); H. Shelmerdine, England; E. W. Skinner, England; A. H. Smith, England; G. Smith, Scotland (second-class honours); G. L. Somerville, M.A., Scotland; W. C. Spiller, England; W. H. G. Stephen, Scotland; J. Stewart, Scotland; R. Stewart, M.A., Scotland; H. J. Stiles, England (first-class honours); R. Stirling, M.A., Scotland; D. Sturrock, Scotland; J. F. Sturrock, Scotland; J. Skyes, Australia; C. Terrey, Australia; W. E. Thomas, Wales; W. J. Thomas, Wales; J. T. Thompson, England; H. A. Thompson, Scotland (second-class honours); H. T. Tomlinson, England; A. Turner, England; J. C. S. Vaughan, India (second-class honours); S. T. Vine, Jamaica; J. R. Wallace, Scotland; J. Warnock, Australia; G. de Bourboulon Watson, Hong Kong; F. G. Westenra, New Zealand; A. B. Whitton, Scotland; S. T. Williamson, England; G. E. C. Wood, Scotland; H. Worsley, England.

SCHOLARSHIPS, &c.—The Ettles Scholarship for 1885 has been awarded to H. J. Stiles, M.B., C.M.; the Goodsir Prize to E. F. Neve, M.D.; the Wightman Prize to C. J. Lewis, M.B., C.M.; the Beaney Prize to H. J. Stiles, M.B., C.M.; the Buchanan Scholarship to T. A. Helme, M.B., C.M.; the James Scott Scholarship to R. Stewart, M.A., M.B., C.M.; and the Murchison Scholarship to J Griffiths, M.B., C.M.

SOCIETY OF APOTHECARIES.—The following gentleman passed their examination in the Science and Practice of Medicine, and received a certificate to practise, on the 20th inst.:—

Ives, William Robert Yeates, Portswood, Southampton.
West, William Paynter, Turnpike-lane, Hornsey.

On the same day the following gentleman passed his examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise:—

Bate, John Frederick, University College.

IT has been decided to hold the annual Hospital Sunday Collection at Hull on October 25th.

THE Queen has signified her acceptance of the position of patroness of Lady Dufferin's fund for providing medical assistance for the women of India.

DR. GIOVANNI BATTISTA SORESINA, founder of the *Giornale Italiano delle Malattie Veneree e delle Pelle*, has recently died, at the advanced age of eighty-two.

VACCINATION GRANT.—Mr. W. Grant Jones, L.R.C.P.Ed., L.R.C.S.Ed., medical officer of the Hastings Union, has received the Government grant for successful vaccination (third time).

RUSSIAN MEDICAL NEWS.—The lady doctors of St. Petersburg are establishing a paying dispensary for women and Children.—Two more field hospitals have been sent off in the Transcaspian region.

OBSCENE LITERATURE.—A meeting of the ratepayers was convened by the churchwardens of St. Mary-le-Strand to protest against the annoyance caused to pedestrians by the vending of indecent publications.

THE Board of Works of the Fulham district has ordered to be delivered at every inhabited house in this district a copy of a circular containing suggestions as to personal and household precautions to be taken in view of the possible advent of cholera in London.

A GREAT International Cookery and Food Exhibition will be held at the Royal Aquarium, Westminster, in December. The exhibition will comprise about 150 classes, and gold, silver, and bronze medals, together with valuable money prizes, will be offered in competition.

HILLMAN *v.* CROSSKEY.—A large and enthusiastic public meeting of the inhabitants of Lewes was held on the 25th inst., to express sympathy with Dr. Crosskey in connexion with the lunacy trial in which he figured as a defendant. A committee was appointed to raise subscriptions, and a large sum was promised in the room.

A DEPUTATION consisting of representatives of the local bodies of Dartford and neighbourhood have recently had an interview with the Local Government Board to petition that board not to sanction the location of any permanent hospital at Darenth for the reception of small-pox patients. Mr. Balfour promised to give the matter serious consideration.

NEW MEMORIAL HOSPITAL AT LLANDUDNO.—A bazaar and fancy fair was held at Llandudno on the 20th, 21st, and 22nd inst., to raise the necessary funds to complete and furnish this institution. Upwards of £2000 (not including the value of the site, which was a free gift of Lord Mostyn) has been expended upon the building, and a further sum of about £1500 was needed.

BOOKS ETC. RECEIVED.

BLACK, ADAM & CHARLES, Edinburgh.

North France, from the English Channel to the Loire, and from the Bay of Biscay to the Rhine, exclusive of Paris. By C. B. Black. pp. 427, with 19 Maps and 20 Plans.

South France, or France beyond the Loire, including Corsica and part of Italy and Spain. By C. B. Black. Fourth Edition. pp. 619—20, with 38 Maps and 23 Plans.

CHURCHILL, J. & A., New Burlington-street, London.

A Text-book of Medical Physics. By John C. Draper, M.D., LL.D. pp. 733, with 377 Illustrations.

ENKE, F., Stuttgart.

Lehrbuch der Chirurgischen Krankheiten des Ohres. Bearbeitet von Prof. Dr. Hermann Schwartze. S. 418, mit 129 Holzschnitten.

IMPRIMERIE NATIONALE, Rio de Janeiro.

Doctrine Microbienne de la Fièvre Jaune et ses Inoculations Préventives. Par le Dr. Domingoes Freire. pp. 451—181, avec gravures et tracés.

KEMP & Co., Cannon-street, London.

Draught. By William Philipson. pp. 23—v.

LEWIS, H. K., Gower-street, London.

Contributions to Pathology and Practice of Medicine. By John Richard Wardell, M.D.Edin. pp. 807.

REEVES & TURNER, Strand, London.

Healing by Faith, or Primitive Mind-cure. By W. F. Evans. pp. 214.

SAMPSON LOW, MARSTON & Co., Fleet-street, London.

A System of Practical Medicine, by American Authors. Edited by William Pepper, M.D., LL.D. Assisted by Louis Starr, M.D. Vol. II.: General Diseases (continued), and Diseases of the Digestive Organs. pp. 1312.

Sanitary Suggestions, or the Householder's Vade Mecum. By Sampson Low, jun., B.A.Cantab. &c. pp. 100, with Illustrations.

SMITH, ELDER, & Co., Waterloo-place, London.

The Influence of the Sympathetic on Disease. By E. Long Fox, M.D.Oxon., F.R.C.P.L. pp. 565, with Illustrations.

Von Ziemssen's Handbook of Therapeutics. In seven volumes. Vol. III.: Respiratory Therapeutics, by Prof. M. J. Oertel, M.D. pp. 709, with Illustrations.

Croonian Lectures on Chronic Pulmonary Phthisis. By Hermann Weber, M.D. pp. 124.

SPON, E. & F. N., Strand, London.

Bad Drains, and how to Test them. By R. Harris Reeves. pp. 68.

WATERLOW BROS. & LAYTON, Birchin-lane, London.

Epitome of the Laws affecting Health now in Force in this Country. By J. V. V. Fitzgerald, Barrister-at-law. pp. 138.

Lehrbuch der Physiologie; Sechste Lieferung.—Index Medicus, Vol. VII., Nos. 6 & 7.—London, Old and New—a Sanitary Contrast; by Ernest Hart.—The Place of Physical Science in Education; by Geo. Grosswell.—Sulla differenti Forme di Nefrite; Sulla Meningite Cerebro-spinale Epidemica in Sicilia; del Dott. Liborio Giuffré.—On Tumours &c.; by Godwin Timms, M.D. (Odell & Ives, Princes-street.)—Parks and Playgrounds for the People; by the Rev. J. Johnston, F.S.S. (Hamilton, Adams, & Co.)—Nature and Treatment of Sporadic and Epidemic Cholera; by Alex. Harkin, M.D., F.R.C.S. (Renshaw.)—Artigo "Cholera" do Diccionario de Therapeutica; traduccao e notas por G. M. da Silva Jones. (Lisboa, Rodrigues.)—The Climate of Llandudno. Second Edition. By James Nicol, M.D. (Heywood, Manchester.)—A New Physical Truth; by E. J. Goodwin, M.D. (Groves & Co., Evansville, Ind.)—Treatment of Mastitis by Bandaging and Rest; by Philander A. Harris, M.D. (Wood, New York.)—Studi Clinici sopra le Ferite di Alcuni Visceri Abdominali e Loro Terapia; pel Dott. Paolo Postremski.—The Scarlet-Runner—the Abuses of the Red-ticket System; by P. J. Bodkin, Physician and Surgeon. (Gill & Son, Dublin.)—Acute Polyurie bei einem Kinde; von Dr. Axel Johannessen.—Work among the Blind; by W. J. Day. (Wyman & Sons.)—Old Age, and Changes incident to it; by Prof. Humphry.—Good Words, Sunday Magazine, for September. (Isbister.)—Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper, September. (London Tract Society.)—Round London—a Holiday Handbook to the Metropolis; by F. E. Longley; &c.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BATHO, WILLIAM, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Amesbury and Winterbourne Districts and Workhouse of the Amesbury Union, vice Pyle, resigned.

DOW, W. OLIPHANT, M.B., C.M.Ed., has been appointed House-Surgeon to the County Hospital, Ayr, N.B.

EVANS, ROBERT, L.R.C.P.Ed., M.R.C.S., has been appointed Assistant Medical Officer to the Workhouse and Infirmary, Hackney Union, vice Fuller, resigned.

GORDON, WILLIAM SPEAR, M.B., B.Ch.Dub., has been appointed Resident Medical Officer for the District Lunatic Asylum, Mullingar.

KING, JOHN CHARLES, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Castlepollard Dispensary, co. Westmeath.

MCCLURE, HENRY, M.D., M.Ch.Q.U.I., has been appointed Medical Officer for the Cromer District of the Erpingham Union, vice McKelvie, resigned.

MAJOR, HERBERT C., M.D., C.M.Ed., has been appointed an Honorary Medical Officer to the Bradford Fever Hospital.

MEARS, ROBERT, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Atherstone District and Workhouse, Atherstone Union, vice Handford, resigned.

OWEN, D. C. LLOYD, F.R.C.S.I., has been appointed Consulting Ophthalmic Surgeon to the Children's Hospital, Birmingham.

RODWAY, EDWIN AUGUSTUS, L.S.A.Lond., has been appointed Medical Officer for the Hamsterley District, Auckland Union, vice Alworthy, deceased.

WEBB, J. EUSTACE, M.B., C.M., has been appointed Junior House-Surgeon to the Western General Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

COTTON.—On the 19th inst., at Spencer-square, Ramsgate, the wife of Charles Cotton, M.R.C.P., M.R.C.S., of a son.

DALE.—On the 21st inst., at Park Lea, Scarborough, the wife of Frederic Dale, M.D.Cantab., F.R.C.S.Eng., of a son.

GREATHEAD.—On the 15th ult., at Graham's Town, South Africa, the wife of J. B. Greathead, M.B.Ed., M.R.C.S., of a son.

MACNALTY.—On the 20th inst., at the Old Vicarage, Greenodd, Ulverston, the wife of F. C. Macnalty, M.D., M.A., M.Ch.Dub.Univ., of a son.

MARRIAGES.

FREELAND—CRAIGIE.—On the 19th inst., at 1, Blenheim-place, Edinburgh, Richard Freeland, M.D.Glas., Broxburn, to Anna Isabella, eldest daughter of Edward Horne Craigie.

GERMAN—SWAN.—On the 27th inst., at Holy Trinity Church, Hartshill, by the Ven. Archdeacon Sir Lovelace T. Stamer, Bart., Rector of Stoke-on-Trent, Frederick Francis German, L.R.C.P., L.R.C.S., & L.M.Ed., of Seaforth, Liverpool, eldest son of Mr. F. German, of Burslem, Staffordshire, to Evelyn Margaret, younger daughter of the late Thomas Carey Swan, of Eccles, Manchester, and granddaughter of the late Samuel Goddard, M.R.C.S.Eng., of Burslem, Staffordshire.

HAMILTON—MOORE.—On the 20th inst., at the Wesleyan Chapel, City-road, London, James Hamilton, L.R.C.P., L.R.C.S.Edin., of Dartford, son of Andrew T. Hamilton, of Meenlougher, Ireland, to Louisa Margaret, only child of Ebenezer Moore, M.R.C.S., of Dartford.

HEDLEY—FORSTER.—On the 24th inst., at Biddleston, Surgeon-Major William Snowdon Hedley, M.D., Medical Staff, to Alice Marian Forster, daughter of the late Thomas Forster, Esq., of Scrain Wood.

MANSELL-MOULLIN—THOMAS.—On the 20th inst., at All Saints' Church, Highgate, Charles William Mansell-Moullin, M.D., F.R.C.S., Fellow of Pembroke College, Oxford, second son of James Mansell-Moullin, to Edith Ruth, eldest daughter of David Collet Thomas, of Woodlands, Muswell-hill-road, Highgate.

O'REILLY—GIBSON.—On the 18th inst., at the English Embassy, Paris, Archibald T. O'Reilly, M.R.C.S., L.R.C.P.Lond., son of the late Rev. Canon O'Reilly, of Sydney, N.S.W., to Helen Maria, daughter of the Rev. W. Gibson, of Paris.

THOMSON—COWIE.—On the 23rd ult., at St. Paul's Cathedral, Calcutta, Samuel John Thomson, Surgeon H.M.'s Indian Army, to Isabel Gordon, elder daughter of Alexander John Cowie, Surgeon-General, Bengal.

DEATHS.

CHALMERS.—On the 21st inst., David Chalmers, M.D., of Slades, Bramley, Surrey, and formerly of Everton, Liverpool, in his 75th year.

DAYMAN.—On the 19th inst., at his residence, Brooklands, Millbrook, Southampton, Henry Dayman, F.R.C.S., in his 77th year.

SWANSON.—On the 24th inst., at Lawrence House, York, Harold Garth, youngest child of George I. Swanson, M.D., aged 9 months.

WARDELL.—On the 21st inst., at Brighton, John Richard Wardell, M.D., F.R.C.P., of Calverley-park, Tunbridge Wells, aged 65.

WEST.—On the 17th inst., at Royal Marine-terrace, Bray, after a long and painful illness, borne with extraordinary patience, John Russell West, M.B., third son of the Very Rev. John West, D.D., Dean of St. Patrick's, Dublin, aged 35.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Aug. 27th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 21	29·87	N.	57	54	92	62	54	·13	Cloudy
,, 22	29·85	W.	55	54	86	66	53	·03	Overcast
,, 23	29·96	N.W.	57	54	79	64	53	...	Cloudy
,, 24	30·05	E.	59	55	80	69	55	...	Overcast
,, 25	30·05	E.	58	56	102	73	53	...	Hazy
,, 26	30·01	E.	62	58	102	70	56	...	Cloudy
,, 27	29·93	S.E.	57	56	...	...	53	·27	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE DELUGE OF OBSCENE LITERATURE.

W. D. is to be congratulated on his belief that the "agitation" will have a good effect. We wish we could think that the good will be at all proportionate to the harm, and to the degradation of journalism. London streets just now are a disgrace to our government, municipal and Imperial. We could not have believed that Sir Richard Cross could prove so helpless at a great crisis. There is a perfect competition of diabolical and disgusting journals night after night, making the streets hideous. To expect an increase of chastity from such literature is to expect grapes from thorns. Whatever the differences between the sexes, there is no difference in moral equality or obligation, and the recognition of moral equality is the best guarantee for mutual reverence.

Dr. W. M. Collins' letter on the sanitary condition of Windsor arrived too late for our present number. It will appear next week.

Mr. S. C. Davison (New York).—The hydrochlorate was the preparation used. The second question, surely, does not require an answer.

MORTALITY AFTER CHILDBIRTH.

To the Editor of THE LANCET.

SIR,—In 1874 I sent you statistics of the above—my experience for the previous ten years. I now enclose you the results of another decade, which may be of interest to those who have lately engaged a portion of your journal on the same subject. From 1864 to 1874, 2330 cases were attended; and from 1874 to 1884, 1783 cases. The following is the mortality in the total, 4083:—Deaths from all causes (signified as under), 28—viz., puerperal fever, 6; peritonitis, 4; mania, 1; cholera (1866), 1; hæmorrhage, 5; pyæmia, 2; carditis, 3; bronchitis, 1; embolism, 1; ruptured uterus, 1; syncope, 3. In these 4083 cases there were: footlings, 8; arm, 5; shoulder, 6; placenta prævia, 8; breech, 26; face, 12; funis and head, 5; funis and hand, 1; hand and face, 1; hydrocephaloid, 2; twins in 39 cases; post-partum hæmorrhage, 42. Interference required as follows: turning, 28; forceps, 90; craniotomy, 8; loop, 18. I remain, Sir, your obedient servant,

Hastings, Aug. 19th, 1885. CHAS. ASHENDEN, M.R.C.S.

Dr. A. C. Sym and *M. A. S.*—Application might be made to Her Majesty's Stationery Office, Prince's-street, Storey's-gate.

Windsor will oblige by sending us his name and address in confidence.

"LIFE-SAVING FROM DROWNING BY SELF-INFLATION."

To the Editor of THE LANCET.

SIR,—I omitted to state in my article on this subject, published in THE LANCET of Jan. 3rd last, that in an emergency, when it is impossible to employ any instrument for the purpose, the required severance of the mucous membrane of the side of the mouth may be effected by the person's own teeth.—I am, Sir, yours faithfully,

London, Aug. 26th, 1885. HENRY R. SILVESTER, M.D., B.A. Lond.

MEDICAL WITNESSES: FEES.

Mr. H. C. Ling.—Our correspondent is compelled to give evidence as to facts, whether a fee has been paid to him previously or not. For such evidence he is only entitled to be remunerated as a common witness. He can legally decline to appear in a police-court as a witness if he has not been subpœnaed. As regards matter of opinion, it is not compulsory to enter the witness-box without a fee having been paid or guaranteed. At the same time, it is bad policy to object on such grounds in a criminal case, as it is very difficult to draw the line between fact and opinion. In a civil action the case is quite different; for there a skilled witness is enlisted by the plaintiff or defendant, and not on behalf of the Crown. The fact of our correspondent being a medical officer to a workhouse does not disentitle him to payment for evidence given in a police-court. In a coroner's court it is the rule of practice to regard such an officer as a hospital surgeon, so that a fee could only be recovered in the case of a person brought in dead. There is, however, high legal opinion that a workhouse infirmary is not included in the schedule of the Coroners Act relating to public institutions.

Mr Thomas Whitley.—The Royal College of Physicians last year issued a circular containing instructions on the subject. A copy of the circular may, we believe, be obtained at the offices of the various local sanitary boards.

THE BRADLEY FUND.

To the Editor of THE LANCET.

SIR,—I enclose a further list of subscriptions, which, perhaps, you will kindly publish in the next issue of your journal.

I remain, Sir, yours faithfully,

Eastwood House, Chesterfield, Aug. 26th, 1885. RICHARD JEFFREYS.

Sir Prescott Hewett, Bt.	£10	10	0	Mr. G. B. Morgan ...	£1	1	0
Sir James Paget, Bt. ...	5	5	0	Mr. J. W. Bramwell ...	1	1	0
Dr. Wilson Fox	5	0	0	Dr. W. Stewart	1	1	0
Mr. J. W. Hulke... ...	3	3	0	Mr. J. Wright Baker ...	1	1	0
Dr. Hughlings Jackson...	3	3	0	Dr. H. Radcliffe Crocker	1	1	0
A Friend	3	3	0	Mr. Thos. Collier... ...	1	1	0
Sir Jos. Fayrer, K.C.S.I.	2	2	0	Dr. Drysdale	1	1	0
Dr. Lionel S. Beale ...	2	2	0	Mr. Francis Mason ...	1	1	0
Mr. Chas. Higgins ...	2	2	0	Dr. J. Shearwood Roberts	1	1	0
Dr. Ogle	2	2	0	Mr. Henry Power ...	1	1	0
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Dr. Macnaughton Jones	2	2	0	Dr. E. Gaylor	0	10	6
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Dr. W. B. Parkes ...	1	1	0	Mr. F. J. Burman ...	0	2	6

M.R.C.S., L.S.A.—Clause 14 of the Act recites: "To enable the respective registrars duly to fulfil the duties imposed upon them, it shall be lawful for the registrar to write a letter to any registered person, addressed to him according to his address on the Register, to inquire whether he has ceased to practise, or has changed his residence; and if no answer shall be returned to such letter within the period of six months from the sending of the letter, it shall be lawful to erase the name of such person from the Register."

Mus.—We certainly do not consider it advisable that the upper limbs should take the place of the lower as a means of propulsion on dry land. There is no reason why bicycles and tricycles, if properly ridden, should produce "sunken chests and rounded shoulders and an ungainly gait."

POST-PARTUM HÆMORRHAGE.

To the Editor of THE LANCET.

SIR,—Perhaps the following may be of interest to your readers.

Having been asked to attend in her confinement a patient who has always had very great loss at those times, in spite of everything that could be done to prevent it, I resolved to adopt a treatment recommended to me by an old practitioner some years ago—viz., giving five-grain doses of gallic acid twice daily, to be taken for about three weeks before confinement. I began with the drug on July 21st, and the confinement took place on Aug. 8th. There was no loss till after the child was born, and then it ceased as soon as the placenta came away. The blood, instead of being pale, thin, and in very great quantity, was very bright, thick, coagulated rapidly, and therefore easily controlled. The case has since gone on remarkably well. As the woman expressed it: "I never had such a confinement." I am, Sir, yours truly,

Worcestershire, Aug. 25th, 1885. C. E. R.

Mr. J. H. Hughes.—Such a style of consultation is most unsatisfactory. The ignorance of the patient and, presumably, his poverty make it proper to bear with irregularities in his procedure; but it is difficult to find an excuse for the consultant who allows himself to be so used—to see the patient of another medical man in his absence, and then to deliver himself of his views of the case, diagnostic and therapeutic, to the regular attendant. This is rather dictation than consultation. Our correspondent should enter a decided protest against such a procedure.

H. B. T.—Our correspondent must certainly ask the consent of the Board, even as a matter of courtesy. If he went away without doing so, or without giving the guardians notice, they would, we believe, have power to fill up his place.

Dr. Shatz (Munich).—We cannot extend our exchange list.

Dr. F. P. Atkinson's letter, though interesting, is unsuited to our columns.

A CASE IN MIDWIFERY PRACTICE.

To the Editor of THE LANCET.

SIR,—Perhaps the following case may be worth inserting in your pages.

I was called to Mrs. B——, who had been in labour four hours. Head above brim. Diagnosis, hydrocephalus of fœtus. Long forceps applied to help diagnosis of size, as the width of the handles apart would indicate. I was somewhat puzzled by the space between the parietal bones not being tense, as one would expect to find in a case of hydrocephalus. It did not strike me that it was caused by the fœtus being dead some few days. (Will make a mental note of this for the future.) Perforator used; a large quantity of water came away. Able to get firm hold of the scalp; extraction easy. Large child; enormous hydrocephalic head, measuring twenty-two inches in circumference. Had also spina bifida. Father suffering from miller's phthisis. One child delicate—tabes mesenterica. I am, Sir, yours truly,

Newbury, Aug. 24th, 1885. MONTAGU H. C. PALMER.

Cyclops.—1. A Turkish bath is dry heat.—2. A temperature of 230° F. to 240° F. is required, and about eight hours should be allowed for the penetration of a bed.—3. Theoretically, yes; but in practice goods will frequently be damaged.—4. Undoubtedly; far more effective, and far less injurious.

Inquirer.—The usual thing is for the medical man's charges to include medicine and attendance; but then, of course, the charges should be such as to cover these just claims, and, above all, the point should be settled beforehand.

Dr. Saundby.—In an early number.

ERASURE OF NAMES FROM THE MEDICAL REGISTER.

To the Editor of THE LANCET.

SIR,—In THE LANCET of July 11th last "Bulbus" complains of the erasure of his name from the Register without his having been previously communicated with. Several years ago my name was erased, as were those of several other Indian medical officers, the first intimation I received being by letters informing me of what had been done. This I consider unjust. The absurdity of applying rules applicable to the postal arrangements of England to men in another hemisphere is evident. My name was on the Register from its commencement. I had received no communication from the Registrar for some twenty-four years, when suddenly I was informed that my name had been erased. Should I return to England to remain there, I intend taking legal opinion with the view of compelling the Council to re-insert my name in the Register.

I am, Sir, yours obediently,

W. J. MOORE, C.I.E.,

Bombay, Aug. 1st, 1885. Surgeon-General, Presidency of Bombay.

Hawaiian.—The following is a pretty complete list of modern works on the Ear, given in the order of date of publication:—Yearsley, 1840; Harvey, 1847; Wilde, 1853; Toynbee, 1860-68; Moos, 1866; Hinton, 1870; Pennefather, 1873; Dalby, 1873; Roosa, 1874; Ll. Thomas, 1876; Burnett, 1877; Field, seconded., 1879; Politzer, translated by Cassells of Glasgow, 1883; Woakes, Lennox Browne, Macnaughton Jones, McBride.

Dr. Gelston will find Dr. Bosworth's case of asthma treated with cocaine in Dr. Knapp's "Cocaine" (Putnam's Sons, New York, 1885), page 68.

Mr. J. Davies (Bath).—Yes.

THE USE OF IODINE INTERNALLY IN PULMONARY CASES.

To the Editor of THE LANCET.

SIR,—It may be interesting to some of your readers to be informed of my experience in the use of iodine in cases of phthisis, or in any pulmonic case where there is an accumulation. I have had several patients under my care where the treatment has been tried, and I have been very pleased with the success obtained. I commence with ten-minim doses of tincture of iodine, increasing it to fifteen and twenty minims. It rapidly absorbs the mucus, without producing any injurious effect upon the system. I am sure if this drug be given a fair trial it will meet with approval, doing away with such drugs as carbonate of ammonia and ipecacuanha, which act as irritants to a certain extent.

I am, Sir, yours faithfully,

Wooburn, Bucks, Aug. 24th, 1885. F. W. ALLWRIGHT, L.R.C.S.I., &c.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Clement Lucas, London; Dr. Robert Fowler, London; Surgeon-General Moore, Bombay; Dr. O'Neill, Lincoln; Dr. Thomas, Sheffield; Dr. Ward Cousins, Southsea; Mr. Lawson Tait, Birmingham; Rev. Arthur Brinckman, London; Dr. Grigg, London; Mr. Bischof; Mr. Longley, London; Mr. J. Davies, Hafod; Mr. Wingrave; Dr. W. M. Collins, Aberdeen; Mr. J. Buchanan, Wigan; Dr. Atkinson, Surbiton; Mr. Holderness, Windsor; Dr. Bruce, London; Dr. R. P. Ritchie, Edinburgh; Mr. Taylor, London, Canada; Mr. C. Leman, Chipping Sodbury; Dr. Saundby, Birmingham; Mr. Pellew; Mr. A. G. Auld, Wick; Dr. Twill, Finchley; Mr. Bland, London; Mr. Fortescue Fox, Strathpeffer; Mr. Allwright, Wooburn; Mr. Laurence Humphry, Cambridge; Messrs. Bertram and Roberts; Dr. Geiston, Limerick; Mr. Russell, Liverpool; Mr. McCoubrey, Dodworth; Mr. Walker, Aberdeen; Mr. Barlow, Birmingham; Mr. Knapton; Messrs. Lee and Nightingale; Mr. Arrowsmith, Bristol; Mr. J. M. Richards, London; Mr. Sampson, New York; Mr. Charley; Mr. Heywood, Manchester; Mr. Chatterton, St. Albans; Mr. Mowbray, Newland Stuart; Mr. Yates, Oldham; Mr. Patterson, Leeds; Mr. W. Gem, London; Mr. Meadows, Hastings; Mr. Jeffreys, Chesterfield; Mr. T. Whitley, Enfield; Mr. J. S. Buck, Bromley; Mr. J. Vose Solomon, Birmingham; Mr. C. S. Davidson, New York; Mr. Walter Whitehead, Manchester; Mr. C. J. Davey, Cape of Good Hope; Mr. Baker, Newport; Messrs. Lee and Martin, Birmingham; Messrs. Oliver and Boyd, Edinburgh; Mr. Kilby, Broadstairs; Mr. Oldham; Mr. Saunders, Manchester; Mr. Kershaw, London; Mr. Davies; Messrs. Mackay, Edinburgh; Dr. Harker, Belfast; Dr. Swanson, York; Mr. Russell, Plaistow; Messrs. Goddard and Massey; Mr. J. S. Wood, London; Dr. Duncan, Glasgow; Mr. Stenhouse, Glasgow; Messrs. Maclachlan and Co., Edinburgh; Mr. Scott, Manchester; Mr. Barnshaw, Eastbourne; Mr. Ruddle; Mr. Brooks, Oxford; Mr. Home; Dr. Silvester; M.B., C.M. Edin.; J. M. L.; Mus; The Director-General of the Navy Medical Department; M., London; M. A. S.; B. A. H.; Medicus; B. F.; Z., Hackney; T. S., Old Kent-road; L.R.C.P.; Bengal.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Wilson; Mr. Stennells; Messrs. Atkinson and Co., Kendal; Messrs. Male Bros., Lancaster; Dr. Furney, Northampton; Mr. Williams, Burton-on-Trent; Mr. J. Ward, London; Mr. Whale, Worksop; Mr. Green, Normanby; Mr. Partridge, Ludlow; Mr. Wilkes; Mr. Hall, Shambrook; Mr. Johnson, Leicester; Mr. Lacy, London; Mr. Crewes, Truro; Dr. Letters, Dundee; Miss Curtice, Eastbourne; Mr. Casella, London; Mr. German, Seaforth; Dr. Jones, Aberkenfig; Dr. Murals, South Africa; Mr. Blentcard, Buckingham; Messrs. Heming and Son, Cheltenham; Mr. Bury, Wrexham; Messrs. Bleak and Co., Bath; Mr. Morgan, Newport; Miss Minks, Chelsea; Messrs. Down Bros., London; Miss Gataker, Bath; Mr. Langer; Mr. Pope; Mr. Morgan; Mr. Maclean, Swindon; Mr. Croker, Hull; Dr. Wilson, Liverpool; Mr. Blenkarne, Buckingham; Messrs. Sullivan Bros., Dublin; Miss Barker, Hovingham; Dr. Macdonald, Lochmaddy; Mr. Edwards, Harrold; Mr. Phelan; Mrs. Roberts, Ramsgate; Q. L., Harwich; W. H. H.; Vertex; Sigma, Ramsgate; C. D.; X. Y., Regent's-park; Matron, Bedford Infirmary; W. A., York; Alpha, Macclesfield; J. H. M.; L. E. V.; R. F. G., Whitby; Lady Superintendent, Leeds; Alpha, Ebbw Vale; Dr. D.; M. S., Bonchurch; J. P., Camberwell; Medicus, Darlington; W. M.; B.; Matron, Kentish-town; A. J. A., Hammersmith; R. A.; Nota Bena, Sheffield; G. H. R., London; C. H. S.; Dragon; Delta; Medicus, Caversham-road; D. B., Southampton; B. S. W., New Kent-road; F. S. A. Wye; R.A.

Church of England Temperance Chronicle, Scotsman, Aberdeen Weekly Free Press, Madras Mail, East Sussex News, English Churchman, Devonport Independent, West Middlesex Herald, Sussex Advertiser, Hull Weekly Express, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M. Also on Thursdays at 2 P.M.

Tuesday, September 1.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Wednesday, September 2.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, September 3.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, September 4.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, September 5.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

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